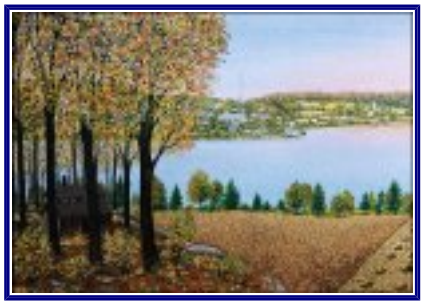
Canadian Journal of Rural Medicine | Journal canadien de la médecine rurale

June 1996 / Juin 1996

Can J Rural Med 1996; 1(1)

Cover: from the mural "The Heart of the Pontiac"

Elke Bzdurreck-Benfey
10.7m x 1.8m
Acrylic on canvas on plywood boards



Mural is located in the
Pontiac Community Hospital, Shawville, Que.,
and is reproduced here
with the permission of the artist

Features • Articles

Editorials • Éditoriaux

Commentary • Commentaire

Original Article • Article original

Canadian Journal of Rural Medicine | Journal canadien de la médecine rurale

June 1996 Contents • Juin 1996 Table des matières

A new venture: CJRM, a voice for rural medicine

John Wootton, MD, CM, CCFP, FCFP
Shawville, Que.

Can J Rural Med 1996; 1(1): 5

In 1979, as a newly minted GP, I stepped somewhat anxiously off an amphibian Grumman Goose to begin 3 months as the only physician in Ocean Falls, BC, an isolated paper-mill town a long way up a very long and lonely coast at the extreme western edge of Canada. I didn't know it then, but I had begun a career in rural medicine.

So impressed was I by that experience that I wrote an editorial in the Canadian Family Physician[1] about the problems that, even as a newcomer, I could see were endemic. Problems such as professional isolation, lack of backup and support, difficulties in recruitment and retention, and insufficient or inappropriate training were all evident.

The hospital in Ocean Falls is long gone, but the problems faced by rural medicine remain very much alive across the country. The Canadian Journal of Rural Medicine (CJRM) is one manifestation of a new determination by rural physicians in every province to address these issues. The CJRM will attempt to keep the rural agenda in the public eye and help promote discussion within the medical community. It is dedicated to the proposition that rural medicine is a distinct discipline, that its practitioners require distinct skills and that they face problems different from those faced by practitioners in non-rural settings. A hard look reveals the multitude of questions to be examined:

- What level of care can/should be provided in rural areas?
- What are appropriate ways to organize that care?
- What training is required for the practice of rural medicine, and who should provide it, and where, and how?
- What factors attract physicians to rural areas?
- What strategies keep them there? What causes them to leave?

Ultimately rural medicine is about the care and services delivered to people in rural areas. If you

have any doubt about the rural nature of Canada, browse through Statistics Canada's Internet site (URL: http://www.statcan.ca) and you'll find that our current population stands at 29 413 100. Depending on the definition, at least a quarter, perhaps closer to a third of that, is rural. That's somewhere between 7 and 10 million people cared for by rural physicians! The CJRM is a new venue to articulate rural doctors' concerns, diffuse their ideas, provide them with educational material tailored to their needs and introduce them to each other.

The rural community is dispersed, both within Canada and internationally. This publication, in its paper version and by publishing simultaneously on the Internet, can help bring the rural community closer together. Your input is important to us. Answering the enclosed survey is one way to respond. We can also be reached by mail, phone and fax, and on the Internet (email: cjrm@fox.nstn.ca). Don't hold back! The way forward promises to be interesting. I hope you come along for the ride.

Reference

1. Wootton JC: Rural medicine: implications for the future. [editorial] Can Fam Physician 1980; 26: 622, 624

Canadian Journal of Rural Medicine | Journal canadien de la médecine rurale

June 1996 Contents • Juin 1996 Table des matières

Une nouvelle aventure : le JCMR, une voix pour la médecine rurale

John Wootton, MD, CM, CCMF, FCFP
Shawville, Que.

Can J Rural Med 1996; 1 (1): 5

En 1979, omnipraticien fraîchement diplômé, je débarquais un peu inquiet d'un Grumman Goose amphibie pour entreprendre trois mois de stage comme seul médecin d'Ocean Falls, en Colombie-Britannique, ville papetière isolée située très loin le long d'une côte très longue et très solitaire, à l'extrême ouest du Canada. Je ne le savais pas à ce moment-là, mais je venais de commencer une carrière en médecine rurale.

J'ai été tellement impressionné par l'expérience que j'ai rédigé un éditorial dans le Canadian Family Physician1 au sujet des problèmes endémiques que même un néophyte comme moi pouvait constater. Des problèmes comme l'isolement professionnel, le manque de remplaçants et d'appui, les difficultés de recrutement et de rétention, une formation insuffisante ou inappropriée, étaient tous évidents.

L'hôpital d'Ocean Falls est disparu depuis longtemps, mais les problèmes de la médecine rurale existent toujours partout au Canada. Le Journal canadien de la médecine rurale (JCMR) démontre que les médecins ruraux de toutes les provinces sont maintenant déterminés à s'attaquer à ces questions. Le JCMR essaiera de garder le programme rural sous les feux de la rampe et d'aider à promouvoir la discussion dans les milieux de la médecine. Le journal est voué au principe selon lequel la médecine rurale est une discipline distincte, dont les praticiens ont besoin de compétences distinctes et font face à des problèmes différents de ceux que connaissent les praticiens en milieu non rural. Un examen attentif révèle la multitude des questions à aborder :

- Quel niveau de soins peut-on ou doit-on fournir en milieu rural?
- Quelles sont les bonnes façons d'organiser les soins en question?
- Quelle formation est nécessaire pour pratiquer la médecine rurale et par qui, où et comment devrait-elle être fournie?
- Quels sont les facteurs qui attirent les médecins dans les régions rurales?
- Quelles stratégies les y gardent? Qu'est-ce qui provoque leur départ?

En bout de ligne, la médecine rurale porte sur les soins et les services fournis à la population des régions rurales. Ceux qui doutent de la nature rurale du Canada n'ont qu'à fureter un peu sur le site Internet de Statistique Canada (URL : http://www.statcan.ca) pour se rendre compte que le Canada compte actuellement 29 413 100 habitants. Selon la définition, au moins le quart et peut-être même plutôt le tiers de cette population vit en milieu rural. C'est-à-dire que les médecins ruraux s'occupent de sept à dix millions de personnes. Le JCMR est un nouveau moyen de présenter les préoccupations des médecins ruraux, de faire connaître leurs idées, de leur fournir du matériel éducatif axé sur leurs besoins et de les présenter les uns aux autres.

La communauté rurale est dispersée, tant au Canada que sur la scène internationale. Dans sa version papier et son édition simultanée sur l'Internet, cette publication peut aider à resserrer les liens de la communauté rurale. Vos commentaires sont importants pour nous. Vous pouvez notamment répondre au questionnaire ci-inclus, ou communiquer avec nous par courrier, téléphone et télécopieur, ainsi que sur l'Internet (courrier électronique : cjrm@fox.nstn.ca). N'attendez pas! La route qui s'ouvre à nous promet d'être intéressante. J'espère que vous nous accompagnerez.

Référence

1. Wootton JC : Rural medicine: implications for the future. [éditorial] Can Fam Physician 1980; 26 : 622, 624

Canadian Journal of Rural Medicine | Journal canadien de la médecine rurale

June 1996 Contents • Juin 1996 Table des matières

Ambulatory epidural analgesia

M. Joanne Douglas, MD, FRCPC
Clinical Professor. Head, Division of Obstetric Anaesthesia, British Columbia Women's Hospital and Health Centre, Vancouver, BC

Can J Rural Med 1996; 1(1): 7-8

Correspondence and reprint requests to: Dr. M. Joanne Douglas, Division of Obstetric Anaesthesia, British Columbia Women's Hospital and Health Centre, 4490 Oak St., Vancouver BC V6H 3V5

This inaugural issue of the Canadian Journal of Rural Medicine contains a thought-provoking and potentially controversial article on the provision of ambulatory epidural analgesia in rural Canada (pages 15 to 18). It not only raises issues relating to the provision of epidural analgesia in rural communities but indirectly raises the issue of who provides that service. Women in Canada are often poorly served with respect to good analgesia during labour, as many hospitals lack an epidural service. Not only is this an issue of consumer concern but it should be an issue of physician concern. Provision of obstetric analgesia has not kept pace with availability of other types of pain management.

The difficulty of providing obstetric analgesia and anesthesia to rural areas is not unique to Canada. Surveys have demonstrated similar problems in many countries.[1-10] Generally speaking, obstetric epidural anesthesia services are available in large centres with a base of specialist anesthetists but are less available in small and moderate-sized units, generally in rural areas. Closure of smaller units has occurred in the United States and United Kingdom because of insufficient obstetric expertise (pediatric, obstetric and anesthetic), and although this is occurring in Canada (regionalization), smaller units will survive, because geography and weather are limiting factors.

If we agree that there is a need for obstetric epidural analgesia, irrespective of location, then the issue becomes one of who should provide it and what skills and expertise are necessary. Currently there are inadequate numbers of specialist anesthetists and inadequate workloads to sustain specialist anesthetic services in most rural communities. Family physicians with

anesthetic skills provide anesthesia in many of these communities but often limit their involvement to the operating room. They may not have the necessary skills nor desire to provide obstetric epidurals. Part of this may have been owing to the previous guidelines, which required a physician to be physically present in the hospital once an epidural was started. Current guidelines to the practice of anesthesia (detailed in Dr. Iglesias's article) allow for initiation of an epidural (continuous infusion) following which the anesthetist only needs to be available for advice and direction. This change imposes the need for specific protocols to detect complications and places added responsibility on the nursing staff to follow those protocols. Some provincial sections of anesthesia have produced specific guidelines, which set out requirements for obstetric epidurals and infusions. The Ontario guidelines specify that "it is not necessary for the responsible physician to remain physically present or immediately available during maintenance of continuous infusion epidural analgesia, provided appropriate protocols for the management of these epidurals and complications thereof are in place, and the responsible physician or another anesthetist to whom this task is delegated can be contacted for the purpose of advice and direction."[11] In my opinion, this does not mean a decrease in the anesthetist's responsibility or vigilance. In the UK the recommended minimum standards for obstetric anesthesia services specifically state that "attending the woman only when called by the midwife is not sufficient."[12] Whenever an epidural is functioning, there is an obligation to review periodically the patient's progress, her level of analgesia and to address any issues that may arise.

What about the acquisition and maintenance of skills? Dr. Iglesias suggests an initial training period of 2 to 4 weeks for physicians who are already qualified to provide anesthesia. I would suggest that physicians who have not previously done epidurals require a minimum of 4 weeks' training. It is not only the technical skills that are required; there are nuances to the practice that are only obtained with time. Obstetric epidural analgesia is more an art than a science.

What about maintenance of skills in centres where there are few opportunities to practise them? Many hospitals in rural Canada have 100 to 200 deliveries per year and of that number 20% to 30% of women might require or wish epidural analgesia. In that situation, the number of epidurals inserted per year would be 20 to 50 and they may be divided among two or three physicians. This is an inadequate number to maintain skill and could result in an increase in complications. A possible solution would be for the anesthetists to have their skills upgraded every 1 to 2 years in a centre where a large volume of epidurals is used.

Who should have this update and who should reimburse the physician for the time away from his or her practice? To date, most physicians who have refreshed their skills have done so because they have recognized a need and wish to be adept in performing epidurals. I would suggest that it is beneficial for any anesthetist who does less than 50 epidurals per year to take a "refresher," and that governments should be prepared to finance it appropriately.

Another issue involves the transfer of function to allow nurses to assume greater responsibilities in the management of epidurals, such as "top-ups." Initiation of this practice would depend on

circumstances in the community and the pattern of practice in the particular province. In a hospital where few epidurals are given this may not be practical, and a more traditional approach, without a transfer of function, may be more appropriate. In a larger centre with a greater volume of deliveries and epidurals it may be possible to increase the nurse's role.

Should a family physician with anesthetic skills administer an epidural to one of his or her own obstetric patients? In other words, should the physician function as anesthetist and obstetrician? In some countries, obstetricians have managed epidurals, but I feel that this should be discouraged because the single physician cannot care for both mother and fetus if complications develop.

As for the technique, Dr. Iglesias makes a plea for the use of a combined spinal epidural (CSE) technique. Although this technique is excellent and is gaining widespread acceptance it is not without its share of complications. Some are common to all epidurals and spinals, namely, post-dural puncture headache, hypotension, unilateral and failed blocks. Rare, but now being reported with the CSE, are cases of meningitis.[13,14] It is thought that breeching of the dura combined with insertion of an indwelling catheter make this complication more likely than with a regular epidural. For these reasons strict asepsis is mandatory. Intrathecal narcotics are associated with several side effects, most of them minor, such as pruritus, but severe respiratory depression may occur.[15,16] In a darkened labour room with a patient who is sleeping this complication may go unrecognized. It is imperative that there be adequate monitoring protocols and that the nursing staff be alert to this possibility. Other complications of intrathecal narcotics include hypotension and fetal bradycardia (without maternal hypotension, possibly associated with uterine hypertonus). Dr. Iglesias has listed steps to ensure that the patient has adequate motor power prior to ambulation. In addition, I test for postural hypotension and for sensation in the feet. Lack of lower limb proprioception or sensation could result in injury if the patient inadvertently "stubs her toe." Initially, the patient should be accompanied by two people (partner and nurse) when ambulating. If the patient requires top-ups, then the same steps must be taken each time prior to ambulation (check motor power, sensation and blood pressure).

Epidural analgesia and its variations, such as CSE analgesia, provide effective pain relief, which is greater than that provided by any other modality, including narcotics. Narcotic analgesia (intramuscularly or intravenously) enables the parturient to cope with the pain of labour but rarely completely abolishes it. Severe pain, which is well handled by an epidural, may imply a labour problem, such as dystocia or an abnormal presentation, which could require a cesarean section. For this reason I would not recommend epidurals in centres that are unable to do a cesarean section. Transferring a patient with an epidural in-situ may be difficult and the very rare complication of a high block or inadvertent spinal anesthetic may require emergent cesarean section in order to resuscitate the patient.

There is a definite need for obstetric epidural anesthetic services in rural communities. Adequately trained rural physicians with anesthetic qualifications and epidural experience will

help to fulfil this need. What needs to be addressed are the length of training required to acquire the skills, a program for ongoing maintenance of those skills and the funding of that training. As well, individual hospitals have to establish minimum monitoring protocols and have an ongoing continuing education program for physicians and nurses to highlight the possible complications that may occur and to ensure their appropriate management. With a low delivery rate these education activities must be repeated regularly to ensure that the staff are aware of the protocol. Our major focus must always be the patient . . . to provide the best possible care and to ensure her comfort and safety.

References

1. Hew EM, Rolbin SH, Cole AF et al: Obstetrical anaesthesia practice in the University of Toronto affiliated hospitals and some randomly selected community hospitals. Can Anaesth Soc J 1981; 28: 158-166
2. McMorland GH, Jenkins LC, Douglas MJ: A survey of obstetric anaesthesia practice in British Columbia. Can Anaesth Soc J 1986; 33: 185-194
3. Hawkins JL, Gibbs CP, Orleans M et al: Obstetric anesthesia workforce survey -- 1992 versus 1981. [abstract] Anesthesiology 1994; 81: A1128
4. Paech MJ, Godkin R: A survey of epidural analgesia practice in Western Australian obstetric units. Anaesth Intensive Care 1991; 19: 388-392
5. Davies MW, Harrison JC, Ryan TD: Current practice of epidural analgesia during normal labour. A survey of maternity units in the United Kingdom. Anaesthesia 1993; 48: 63-65
6. Schneider M, Graber J, Thorin D et al: A survey of current obstetric anaesthesia practice in Switzerland. Int J Obstet Anaesth 1995; 4: 107-113
7. Scott DB, Aitken RE: Obstetric anaesthetic services in Scotland in 1982. Anaesthesia 1986; 48: 370-374
8. Frank M, Heywood A, MacLeod DM: Survey of the practice of epidural analgesia in a regional sample of obstetric units. Anaesthesia 1988; 43: 54-58
9. Hibbard BM, Scott DB: The availability of epidural anaesthesia and analgesia in obstetrics. Br J Obstet Gynaecol 1990; 97: 402-405
10. Hanson B, Matouskova-Hanson A: Continuous epidural analgesia for vaginal delivery in Sweden. Report of a nationwide inquiry. Acta Anaesthesiol Scand 1985; 29: 712-715
11. Smedstad KG, Doig G, Halpern S et al: Administration of epidural analgesia for pain relief in labour. Ont Med Rev 1992; November: 33-34
12. Obstetric Anaesthetists' Association: Recommended minimum standards for obstetric anaesthesia services. Int J Obstet Anesth 1995; 4: 125-128
13. Stallard N, Barry P: Another complication of the combined extradural-subarachnoid technique. Br J Anaesth 1995; 75: 370-371
14. Hardin SA, Collis RE, Morgan BM: Meningitis after combined spinal-extradural anaesthesia in obstetrics. Br J Anaesth 1994; 73: 545-547
15. Greenhalgh CA: Respiratory arrest in a parturient following intrathecal injection of sufentanil and bupivacaine. Anaesthesia 1996; 51: 173-175

16. Hays RL, Palmer CM: Respiratory depression after intrathecal sufentanil during labor. Anesthesiology 1994; 81: 511-512

Canadian Journal of Rural Medicine | Journal canadien de la médecine rurale

June 1996 Contents • Juin 1996 Table des matières

Why have a society of rural physicians?

Keith MacLellan, MD
President, Society of Rural Physicians of Canada
Shawville, Que.

Can J Rural Med 1996; 1(1): 11

As rural doctors we practise a distinct form of medicine and have many challenges in common. We are placed in difficult situations without extensive specialist back-up; we are understaffed and cope with crippling emergency room coverage; we are underequipped and deal with patients with severe pathology; we are underpaid and see cutbacks looming; we are undertrained and face disincentives for continuing medical education (CME), and we are underrepresented in our professional organizations and universities. Yet we are true generalists, who provide excellent care to the one-third of Canadians who live in rural areas. We have chosen our careers for the challenges and pleasures that rural practice and rural living provide.

It has been difficult to bring the interests and concerns of rural medicine to the attention of Canadian decision-makers. Provincial and national professional associations are dominated by their urban majorities. University and standard-setting bodies such as the College of Family Physicians of Canada or the Royal College of Physicians and Surgeons of Canada have pursued training policies that are well suited to centralized medical models but ignore the geographic, demographic and economic facts of Canada. Provincial and federal governments have tried to help their rural constituents with a hodgepodge of rural medicine programs, but they must rely on the existing urban medical organizations for advice and have never produced a workable plan.

With all this in mind, the Society of Rural Physicians of Canada (SRPC) was formed in 1992 by a group of physicians from Mount Forest, Ont. In just four years we have registered solid achievements, all of which would not likely have happened without our organization.

- Because CME pertinent to rural medicine was not available from the usual sources, we initiated a creative cooperation with the universities to set up courses designed by rural doctors for those in the field.
- Our fourth annual national conference and course on rural and remote area medicine took

place in Banff in April 1996. We are also setting up a rural CME hour for weekly broadcast on the upcoming digital satellite network. It promises to be useful and interesting.

- With this issue we are launching the Canadian Journal of Rural Medicine, which will be an independent forum for rural medicine topics and research.
- We have created RuralMed, an internet discussion group, which is active nationally and internationally and available to all interested persons.
- We have developed a series of creative and pertinent rural medicine policy issues.
- We have made representations to national and provincial governments and medical bodies, including Health Canada, many of the provincial ministries of health, and the Canadian Medical Association.
- We hosted a national meeting this past April on recruitment and retention issues.
- We are initiating and coordinating local and provincial pressure tactics to bring about change. The SRPC played a large part in Ontario emergency room actions from 1991 to 1995 (and the subsequent Scott Report1) and in the Ontario government's recent plan to address some of the fee-schedule problems of Ontario's rural doctors.
- We are providing political support to rural doctors across Canada and are planning a video to help them explain their difficulties to community organizations and representatives.
- We are bringing social and psychological support to rural doctors and their spouses and families, and setting up lectures on financial planning, sleep deprivation and physician well-being.

All of this and more is the result of years of behind-the-scenes hard work done by our executive members. Unpaid and without charging expenses they have fielded calls and letters from all over the country; handled, or been handled, by the media; written letters and briefs; coordinated conferences and conference calls; helped various groups to communicate; fostered connections; put out newsletters; made international contacts; formed policies and, most importantly, have given moral support and useful advice to rural doctors across the country. This has all been done on a shoestring budget based on membership dues alone and without the support of grants, advertising or other sources of income. If you would like to help keep the SRPC going, please give us your support by filling out and mailing a copy of the membership form found on the inside back cover.

Your support will help keep the concerns of rural medicine on the front burner and will help us to improve the lives of rural doctors and the people they serve.

Reference

1. Scott GWS: Report of the Fact Finder on the Issue of Small/Rural Hospital Emergency Department Physician Service, Ontario Ministry of Health, Ontario Hospital Association, Ontario Medical Association, Toronto, 1995: Mar 22

Canadian Journal of Rural Medicine | Journal canadien de la médecine rurale

June 1996 Contents • Juin 1996 Table des matières

Pourquoi une société des médecins ruraux?

Keith MacLellan, MD
Shawville (Québec)
Président, Société de la médecine rurale du Canada

Can J Rural Med 1996; 1 (1): 12

Comme médecins ruraux, nous pratiquons une médecine distincte et nous avons de nombreux défis communs à relever. Nous nous retrouvons dans des situations difficiles sans bénéficier de l'appui de nombreux spécialistes. Nous manquons de personnel et nous avons des horaires écrasants à l'urgence. Nous sommes sous-équipés et nous traitons des patients qui ont de graves maladies. Nous sommes mal payés et nous voyons venir des compressions. Notre formation est insuffisante et nous nous butons à des désincitations à l'égard de l'éducation médicale continue (EMC). Nous sommes en outre sous-représentés dans nos organisations professionnelles et dans les universités. Or, nous sommes de véritables généralistes qui fournissent des soins excellents au tiers de la population canadienne des régions rurales. Notre choix de carrière était lié aux défis et aux plaisirs de la pratique et de la vie en milieu rural.

Il est difficile d'attirer l'attention des décideurs du Canada sur les intérêts et les préoccupations de la médecine rurale. Les associations professionnelles provinciales et nationales sont dominées par leur majorité urbaine. Les universités et les organismes normatifs comme le Collège des médecins de famille du Canada ou le Collège royal des médecins et chirurgiens du Canada ont des pratiques de formation qui conviennent bien aux modèles médicaux centralisés, mais qui ne tiennent pas compte de la réalité géographique, démographique et économique du Canada. Les gouvernements provinciaux et fédéral ont essayé d'aider leur électeurs ruraux par toutes sortes de programmes de médecine rurale, mais ils doivent s'en remettre aux conseils des organisations médicales urbaines actuelles et n'ont jamais produit de plan réalisable.

C'est en tenant compte de tous ces aspects qu'un groupe de médecins de Mount Forest (Ontario) a créé en 1992 la Société de la médecine rurale du Canada (SMRC). En 4 ans à peine, nous pouvons faire état de réalisations solides qui n'auraient probablement pas vu le jour sans notre organisation.

- Comme les fournisseurs habituels n'offraient pas d'EMC pertinente à la médecine rurale, nous avons lancé une collaboration créatrice avec les universités pour établir des cours conçus par des médecins ruraux pour des médecins ruraux.
- Notre quatrième conférence nationale annuelle et cours sur la médecine dans les régions rurales et éloignées a eu lieu à Banff, en avril 1996. Nous préparons aussi une heure d'EMC rurale qui sera diffusée une fois par semaine sur le futur réseau satellite numérique. Cette heure promet d'être utile et intéressante.
- Nous lançons avec ce numéro le Journal canadien de la médecine rurale, tribune indépendante pour les sujets et la recherche liés à la médecine rurale.
- Nous avons créé RuralMed, groupe de discussion sur l'Internet, actif à l'échelon national et international et accessible à tous les intéressés.
- Nous avons élaboré une série d'enjeux stratégiques de la médecine rurale qui sont créatifs et pertinents.
- Nous avons présenté des instances à des gouvernements et à des organismes médicaux nationaux et provinciaux, y compris Santé Canada, un grand nombre des ministres provinciaux de la Santé et l'Association médicale canadienne.
- Nous avons organisé, en avril dernier, une réunion nationale sur le recrutement et la rétention.
- Nous lançons et coordonnons, aux échelons local et provincial, des mesures de pression pour instaurer le changement. La SMRC a joué un rôle important dans les interventions relatives aux services d'urgence en Ontario, de 1991 à 1995 (et le rapport Scott1 qui a suivi), ainsi que dans le plan formulé récemment par le gouvernement de l'Ontario pour régler certains des problèmes d'honoraires des médecins ruraux de l'Ontario.
- Nous accordons de l'appui politique aux médecins ruraux de toutes les régions du Canada et nous préparons un enregistrement vidéo pour les aider à expliquer leurs difficultés aux organisations et aux représentants communautaires.
- Nous fournissons un appui social et psychologique aux médecins ruraux, à leur conjoint et aux membres de leur famille, et nous préparons des conférences sur la planification financière, le manque de sommeil et le mieux-être des médecins.

Toutes ces activités et d'autres encore sont le fruit d'années de dur travail effectué dans les coulisses par les membres de notre direction. Sans rémunération et sans se faire rembourser leurs dépenses, ils ont reçu des appels et des lettres de toutes les régions du pays, répondu aux médias ou leur ont fait face, rédigé de la correspondance et des mémoires, coordonné des conférences et des téléconférences, aidé divers groupes à communiquer, favorisé l'établissement de contacts, produit des bulletins, établi des contacts à l'échelon international, élaboré des politiques et, ce qui importe le plus, fourni de l'appui moral et des conseils utiles aux médecins ruraux de toutes les régions du Canada. Tout cela s'est fait à même un budget minime fondé sur des cotisations seulement et sans subvention, publicité ou autre source de revenu. Si vous voulez aider la SMRC à survivre, appuyez-nous en remplissant et renvoyant une copie de la formule d'adhésion l'on retrouve en fin de page.

Votre appui nous aidera à garder les préoccupations de la médecine rurale à l'avant-scène et à améliorer la vie des médecins ruraux et des gens qu'ils servent.

Référence

1. Scott GWS : Report of the Fact Finder on the Issue of Small/Rural Hospital Emergency Department Physician Service, Ontario Ministry of Health, Ontario Hospital Association, Ontario Medical Association, Toronto, 1995 : Mar 22

Canadian Journal of Rural Medicine | Journal canadien de la médecine rurale

June 1996 Contents • Juin 1996 Table des matières

Ambulatory epidural analgesia in obstetrics: a proposal for rural Canada

Stuart Iglesias, MD
Hinton Medical Clinic, Hinton, Alta.

Can J Rural Med 1996; 1(1): 15-18

Correspondence and reprint requests to: Dr. Stuart Iglesias, Hinton Medical Clinic, PO Box 2327, Station A, Hinton AB T7V 1Y2

Extradural or intrathecal administration of dilute local anesthetics and narcotics has become the standard of care in obstetric anesthesia.[1] The efficacy of pain relief is excellent and the frequency of serious complications low.[2-4] Widespread maternal and paternal satisfaction have accompanied the introduction of this type of service. Reviews of large series of patients, from numerous cultures and populations, have demonstrated that, when offered the service, approximately 30% to 50% of patients request epidural analgesia in labour.[5-8]

Is such a service appropriate in a rural setting? A number of possible impediments can be listed. There is a lack of specialist obstetric and anesthetic staff. The obstetric abilities of rural nursing staff vary. Anesthesia services in rural Canada are provided by family practitioners, who usually work in their offices, away from the hospital. Onerous on-call schedules in the emergency department reduce the attraction of additional off-hour responsibilities in obstetrics. Many of rural Canada's anesthetists are not trained in epidural techniques or their skills are out of date.

Out of these concerns came the requisite principles of a rural epidural program:

- The required skills must be simple, easily and quickly acquired, and accessible through continuing medical education programs, preferably with some financial compensation for time away from practice.
- The procedures must be safe, requiring only basic monitoring skills with which any nurse would feel comfortable. Serious complications must be rare, and nuisance complications must be recognized easily and resolved.
- Time constraints on the general practice (GP) anesthetist and staff should not be onerous. In particular, the procedures must be safe enough that the anesthetist initiating the epidural

is free to leave the hospital. The analgesic technique must be sufficiently long-acting to minimize the need for "topping-up." Alternatively, if the safety margin of the epidural procedures is high, topping-up might be done by medical colleagues already in the hospital who are responsible for delivery.

The acquisition and maintenance of spinal and epidural skills should not pose significant problems. Virtually all of the postgraduate 12-month GP anesthesia programs in Canada include a significant training period in obstetric anesthesia. For those trained earlier or elsewhere, the departments of anesthesia, to their great credit, are almost universally accessible, either formally or informally, for continuing medical education. For rural GP anesthetists with an aptitude for procedures, these skills usually can be acquired in 2 to 4 weeks. Refresher opportunities usually require 1 week or less. Some provinces, such as Alberta, provide financial compensation for time away from practice for rural physicians acquiring these skills.

The safety issues of epidural analgesia have changed considerably over the past decade. Initially, high concentrations of local anesthetics delivered by bolus top-ups provided dense motor and sensory block. The risks of inadvertent spinal or vascular injection, while rare, were life-threatening and necessitated considerable caution and on-site anesthetic management. It was generally accepted that a physician would remain in the hospital after initiating an epidural anesthetic. The worry of life-threatening complications and the onerous demands on anesthetic staff restricted the introduction of epidural services in rural Canada.

Significant changes in concentrations and doses of local anesthetics, the addition of short-acting narcotics and modifications in delivery systems have changed epidural services dramatically and created an opportunity for the initiation of safe and provider-friendly rural programs. Bupivacaine hydrochloride remains the local anesthetic of choice, but concentrations rarely exceed 0.125% and are often as low as 0.05%. This agent may be combined with low concentrations (2 µg/mL) of fentanyl citrate; in such cases, the two drugs act synergistically in both effect and duration. Continuous infusion of low concentrations of bupivacaine and fentanyl has eliminated much of the need for bolus injections into the epidural space and, accordingly, most of the risk of life-threatening complications. Dense motor and sensory blocks are avoided. Equally helpful is the very low frequency of less serious complications, such as hypotension. Monitoring is important, but the associated nursing skills are basic. Appropriate protocols are required and must be applied rigorously. The most important intervention on the part of the nursing staff is to simply turn off the epidural infusion. The safety features of the new continuous infusion devices have been recognized by the Canadian Anesthetists' Society in their guidelines[9] (see sidebar).

Once freed from the requirement to remain in the hospital and relieved of the necessity to provide regular top-ups, many GP anesthetists are prepared to look more favourably on requests for epidural services.

The most recent innovation in epidural delivery systems is the adoption of combined spinal

epidural techniques. A persistent and consistent complaint about epidural analgesia is confinement to bed. Women perceive and dislike the loss of control of the labour and delivery process associated with motor and sensory block. Even incomplete paralysis is often frightening. Although there are no good data to support the suggestion, many investigators have suspected that loss of ambulation adversely affects outcome. Some programs have provided ambulatory epidural analgesia by using narcotics either alone or in combination with ultra-low-dose local anesthetics.[10] However, analgesia is sometimes imperfect, onset is quite slow and if top-ups are not done promptly the ensuing "catch-up" is difficult and frustrating for both anesthetist and patient. Issues of slow onset and catch-up can be managed most effectively with larger volumes, but the associated motor block will inevitably impede ambulation.

Better results have been obtained with a combined spinal epidural technique (see sidebar), initially developed and published in the United Kingdom[11] and now used extensively in a number of large obstetric anesthetic practices in Canada, such as the British Columbia Women's Hospital and Health Centre, Vancouver, and the Grace Maternity Hospital, Halifax. An initial dose of fentanyl alone (37.5 µg) or in combination with bupivacaine (25 µg plus 2.5 mg) is given intrathecally with a 25- or 27-gauge Whitacre or Quincke needle. Immediately after, the epidural catheter is sited in the usual fashion. Subsequent top-ups and continuous infusions are given through the epidural catheter. Onset is extremely rapid, within 1 to 5 minutes. Within 30 minutes, most patients are able to walk about and void, while retaining excellent analgesia. Of course, a nurse should be with the mother when she is walking and should monitor the mother's muscle power. The most commonly reported side-effect was pruritus (in 17.3% of patients) (Table 1). Transient hypotension occurred in 8.0% of cases. Postdural puncture headache was reported in 2.3% of cases, which compares favourably with conventional epidural analgesia techniques. Respiratory depression has not been reported.

Table 1. Combined spinal epidural techniques: complications and side effects in 300 patients*

Complication	Number (%)
Failed subarachnoid block	32 (10.7)
Pain in dural puncture	48 (16.0)
20% fall in blood pressure	24 (8.0)
Ephedrine	55 (18.3)
Pruritus	52 (17.3)
Naloxone given	10 (3.3)
Post dural puncture headache	7 (2.3)
Blood patch	6 (2.0)
Postpartum urinary retention	2 (0.7)

The impact of this procedure on rural obstetric anesthetic practices is significant. Rapidity of onset is provider-friendly. Low doses of local anesthetics given to ambulating patients have

improved the safety margins for patients and reduced the anxiety level for nursing personnel. There continues to be a possibility of subarachnoid or intravenous bolus injections through a displaced catheter. However, top-up doses, always equal to or less than 10 mg bupivacaine, are not great enough to provide a high spinal block or systemic toxicity.[11] With such enormous safety margins, there is an opportunity for nonanesthetist family practitioners who deliver babies (and perhaps nurses as well) to undergo training so that they can manage a previously sited epidural in the patients under their care.

Safety will continue to be the benchmark of success. Appropriate training, both in tertiary-care centres and as part of continuing medical education programs within individual hospitals, is mandatory. Some thought must be given to maintenance of competency issues.

Why bother with ambulatory epidural analgesia? Slowly, as a profession, we are changing our attitude that relief of obstetric pain is "elective." In no other area of medicine is it acceptable for a patient to be under a physician's care and left to endure severe pain that is amenable to safe and effective intervention. Some women and their physicians will prefer other methods of coping with the pain. However, a woman's choice to deliver in rural Canada should not preclude a full choice of pain control options.

Rural Canada is not poorly served with anesthetic skills in general. Upgrading to spinal epidural skills is technically easy, accessible and affordable. New protocols, such as the ones suggested in this paper, are extremely safe and provider-friendly. The professional satisfaction of providing state-of-the-art services, accompanied by the tremendous maternal and paternal satisfaction associated with the service, should encourage many rural obstetric centres to provide spinal epidural analgesia in labour.

References

1. Smedstad KG: Pain relief in labour. J Soc Gynaecol Obstet Can 1992; 14: 26-32
2. Ong BY, Cohen MM, Cumming M et al: Obstetrical anesthesia at Winnipeg Women's Hospital 1975-83: anaesthetic techniques and complications. Can J Anaesth 1987; 34: 294-299
3. Bromage PR: Neurologic complications of regional anesthesia for obstetrics. In Schneider SM, Levison G (eds): Anesthesia for Obstetrics, 2nd ed, Williams and Wilkins, Baltimore, 1987: 316-324
4. Ong BY, Cohen MM, Esmail A et al: Paresthesias and motor dysfunction after labor and delivery. Anesth Analg 1987; 66: 18-22
5. Bailey PW, Howard FA: Epidural analgesia and forceps. Anesthesia 1983; 38: 282-285
6. Niv D, Ber A, Rudick V et al: Mode of vaginal delivery and epidural analgesia. Isr J Med Sci 1988; 24: 80-83
7. Carli F, Creagh-Barry P, Gordon H et al: Does epidural analgesia influence the mode of delivery in primiparae managed actively? Int J Obstet Anaesth 1993; 2: 15-20

8. Iglesias S, Burn R, Saunders LD: Reducing the cesarean section rate in a rural community hospital. Can Med Assoc J 1991; 145: 1459-1464
9. Recommendations regarding epidural analgesia. Can Anaesth Soc News 1991; 7 (2)
10. Breen TW, Shapiro T, Glass B et al: Epidural anesthesia for labor in an ambulatory patient. Anesth Analg 1993; 77: 919-924
11. Collis RE, Baxandall ML, Srikantharajeh JD et al: Combined spinal epidural (CSE) analgesia: technique, management, and outcome of 300 mothers. Int J Obstet Anesth 1994; 3: 75-81

A recent issue of the Journal of the Society of Obstetricians and Gynaecologists of Canada featured the favourable impact of a rural epidural program on obstetric outcomes.

Canadian Journal of Rural Medicine | Journal canadien de la médecine rurale

June 1996 Contents • Juin 1996 Table des matières

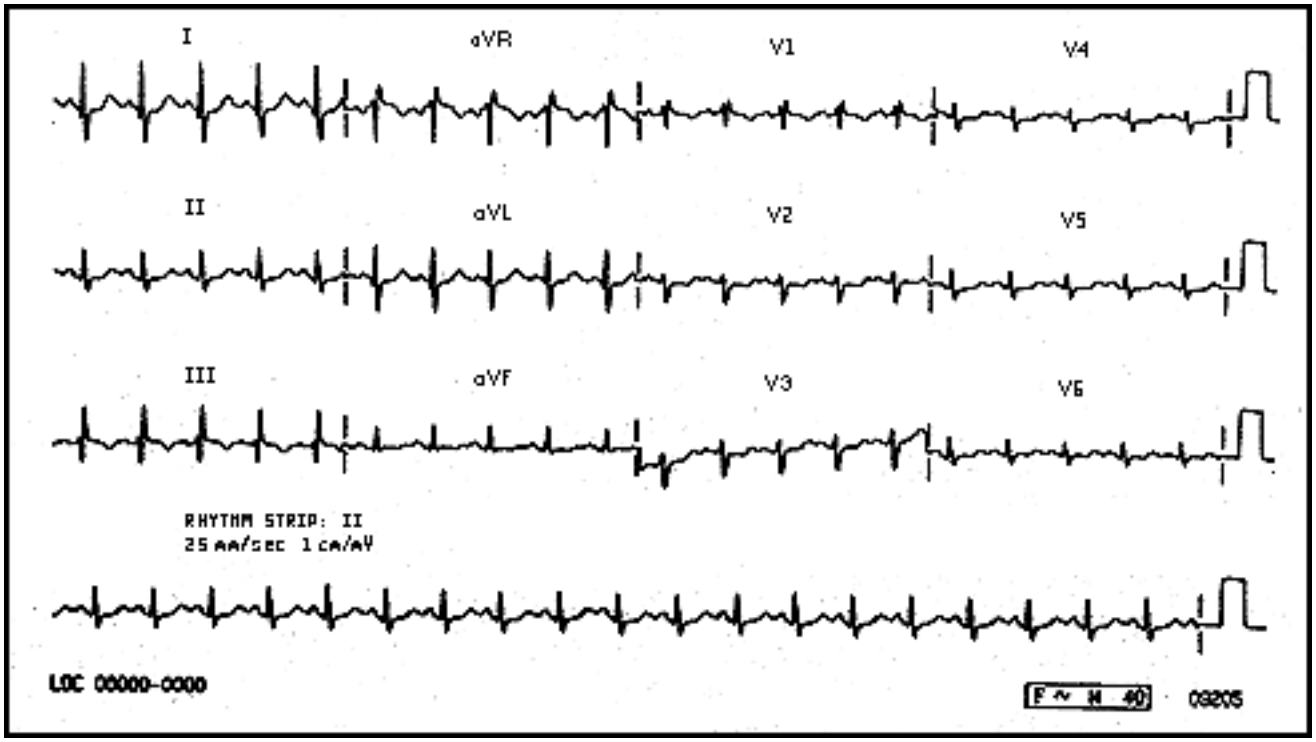
Country cardiograms: Case 1

Jim Thompson, MD, CCFP(EM), FCFP
Clinical Associate Professor, Department of Family Medicine, The University of Calgary, Calgary, Alta.

Can J Rural Med 1996; 1 (1): 19

Case presentation

A 45-year-old woman presented to a rural hospital emergency department on a Sunday morning complaining of chest heaviness and dizziness, which had been present since the day before. For the previous week she had been experiencing considerable family stress, headache, sore throat and sinus pressure. The patient was very anxious on examination and her voice was hoarse, but otherwise there were no abnormal findings. The emergency department nurse obtained an electrocardiogram before the on-call physician arrived to examine the patient.



What is your diagnosis, and how would you manage this patient in your rural setting?

See the answer and discussion.

"Country cardiograms" is a regular feature of the Canadian Journal of Rural Medicine. In each issue we will present an electrocardiogram and discuss the case in a rural contxSubmit cases to Dr. Jim Thompson, Canadian Journal of Rural Medicine, Bag 5, Sundre AB T0M 1X0 (email: jthompso@agt.net).

Canadian Journal of Rural Medicine | Journal canadien de la médecine rurale

June 1996 Contents • Juin 1996 Table des matières

The occasional chest tube

Keith MacLellan, MD
Pontiac Community Hospital, Inc., Shawville, Que.; Assistant Professor in Family Medicine, McGill University, Montreal, Que.

Can J Rural Med 1996; 1(1): 20-21

Correspondence and reprint requests to: Dr. Keith MacLellan, PO Box 609, Shawville QC J0X 2Y0

The term "Hobson's choice" refers to situations in which there really is no choice at all; an example is Henry Ford's famous dictum about choosing any colour for a car, providing that the colour is black. Rural physicians not infrequently face a Hobson's choice each time they undertake urgently needed procedures, ones that they rarely perform and for which they have little or no training, because the alternative -- transferring the patient elsewhere -- is impossible. The insertion of a chest tube is one such procedure. This article outlines a simple method for chest drainage that needs no practise for maintenance of competence and that causes little trauma for either the patient or the doctor. The article covers the procedure only, rather than diagnosis and long-term management in such cases. It also assumes that true, significant pneumothorax, hemopneumothorax or pleural effusion is present.

The accompanying illustrations were obtained with the permission and collaboration of the Department of Anatomy, McGill University, Montreal.

Indications

The three most common reasons for chest tube insertion in rural areas are:

- spontaneous pneumothorax greater than 20%
- traumatic pneumothorax, hemothorax or hemopneumothorax
- terminal malignant pleural effusion with dyspnea.

Materials

The following materials are needed:

- dry dressing tray with povidone-iodine for prep
- lidocaine (Xylocaine) 2% without adrenaline in a 5-mL syringe
- 25-gauge, 11Ž2-in. needle for infiltration
- scalpel (any size)
- sterile drapes
- 1-0 silk suture
- chest tube set with needle, syringe, guide wire and dilators*
- drainage system*
- sterile gloves.

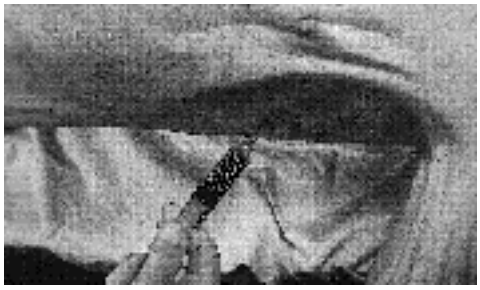
*Thal-Quick chest tube sets in various sizes can be ordered from Cook Critical Care (800 465-0547), and Thoraklex chest drainage sets can be ordered from Deknatel Snowden Penca Inc. (800 367-7874).

Procedure

The patient should be draped and prepped. The physician should be draped, scrubbed and gloved in a sterile fashion if time permits.

Step 1
Choose a point of entry. The best spot for all indications is the fourth to sixth intercostal space in the midaxillary line. An easy way to find this spot is to measure about one hand's width from the axilla or choose a spot even with the nipple line, although this position will vary according to body type and hand size. The second intercostal space at the midclavicular line can be used for simple pneumothorax but will leave a scar anteriorly.

Step 2
After proper sterile prep and draping, administer extensive local anesthetic, infiltrating down to and then riding over the top of the rib. Avoid the lower edge of the rib where blood vessels are located. Freeze down to the pleura during aspiration. Pleural puncture is not a worry as a tube will be inserted shortly.



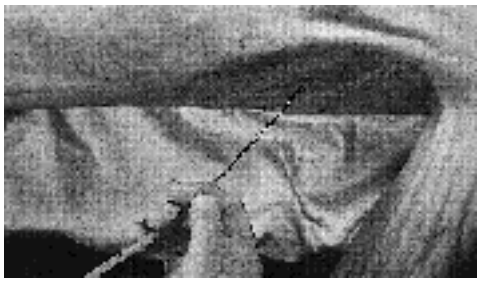
Step 3
After freezing, insert the needle provided in the chest tube kit until the pleura is punctured and air, blood or other fluid returns into the syringe. Advance the needle slightly to make sure that the end stays in the cavity. The direction of the needle and the tube is not critical, but for pneumothorax, the needle can be directed anteriorly, if care is taken to avoid the lower edge of the next rib. For pleural effusion or fluid-air collections, direct the needle downward and posteriorly.

Step 4
Unscrew the syringe, then cover the hub with your thumb or ask the patient to stop breathing momentarily. Do not worry if some air sucks into the chest cavity.

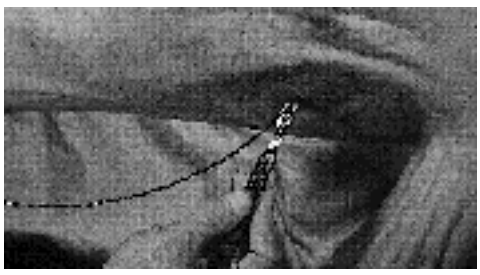
Step 5
Insert the soft J end of the guide wire through the needle into the chest cavity. The guide wire has a plastic hub at the J end to straighten it when it is going through the needle. Some physicians put forceps on the needle close to the skin to prevent the needle from penetrating too deeply into the cavity.

Step 6
Thread the guide wire about 10 cm into the chest cavity or up to the mark on the wire. It should go in without resistance. The J end will resume its shape once free of the needle, preventing injury to the collapsed lung. The wire is quite long, and patient draping could include a sterile gown spread out beside the patient on which the wire can rest uncontaminated.

Step 7
Remove the needle over the wire, taking care not to remove the wire. There will be plenty of slack, so movement of the wire a few centimetres either way is not a worry.



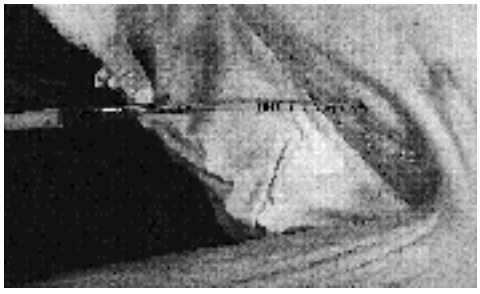
Step 8
Following the wire, infiltrate widely again with Xylocaine around the rib and pleura. Make a skin incision wider than the size of tube you are going to use, with the wire serving as a guide.



Step 9
Slide the smallest dilator along the wire and insert with a twisting motion into the chest cavity. Again, make sure that the wire itself does not move excessively. Remove the dilator and repeat with the next larger size dilators until all have been used, except for the last one, which carries the chest tube.

Step 10
Slide the last dilator with the chest tube over the wire and into the chest cavity until all the holes of the tube are well within the chest cavity.

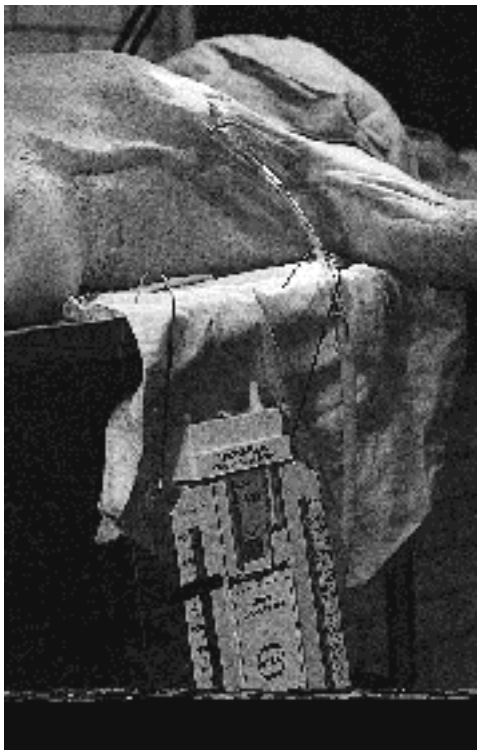
Step 11
Remove the dilator, leaving the patent tube in place, and connect the tube to the drainage system.



Step 12
Suture the tube in place. Some physicians use a purse-string suture to help in closing the incision when the tube is removed.

Step 13
Take several layers of 4 x 4 cm Vaseline gauze (such as Adaptic or Jelonet), make a cut with scissors to the centre, place around the tube, follow with several layers of 4 x 4 cm plain gauze and tape with waterproof tape, incorporating some of the tape around the tube.

Step 14
Begin drainage. We use a self-contained drainage system, which is easy to use and is attached to standard wall suction, but any system -- twin bottles, Heimlich valves or a simple rubber glove with a slit opened on the end -- will do.



When a lung re-expands there is some pleural pain, which can be treated with analgesics or intramuscular or intravenous narcotics. Very rapid re-expansion can cause unilateral pulmonary edema, but this complication is rare and usually does not require treatment. If the tube is placed too far into the cavity, the pleural pain it causes can be relieved by withdrawing the tube a few centimetres. When draining large amounts of pleural fluid or blood, temporarily clamp the tube, if possible, after the first litre to minimize large fluid shifts. For simple pneumothorax, use a 24 French tube and for hemothorax a 32 French tube. For malignant effusion or when the patient is a child, an 18 French tube or smaller is sufficient.

Conclusion

This method is very easy and atraumatic. There should be no accident victim imperilled by a lack of chest drainage, no patient with spontaneous pneumothorax transported in pain and dyspnea, no patient with terminal cancer dying in dyspnea from a large effusion and no fear of a Hobson's choice in chest tube insertion for the rural doctor.

Canadian Journal of Rural Medicine | Journal canadien de la médecine rurale

June 1996 Contents • Juin 1996 Table des matières

Focus on Ontario

Ken Babey, MD
Mount Forest, Ont.
Secretary, Society of Rural Physicians of Canada

Can J Rural Med 1996 1(1): 27

Major initiatives in health care restructuring have finally reached Ontario. With the passage of the "Omnibus Bill" (Bill 26),[1] in January 1996, the government now has legislation that enables it to close and amalgamate hospitals and a direct say in where doctors may set up practice. No geographic billing restrictions have yet been imposed, but under the new legislation that could happen. Many physician groups are uneasy with the new legislation. Whether it is used directly or merely stands as a threat, it is bound to be a harbinger of change.

Other legislation in Ontario has had an impact on medically underserved communities. Bill 50[2] has been in place since 1993. It limits the flow of doctors into the province unless they go to areas designated as underserviced. There has been a brisk traffic of physicians contacting rural communities; however, it is difficult to say whether Bill 50 has increased rural physician numbers.

The Scott Report[3] is now a year old. It has not been possible for the Ontario Medical Association (OMA) to create any of the rural initiatives called for in this Report. The impasse hinged around the fact that the OMA was unwilling to implement the suggested initiatives within the confines of its capped budget, and the Ontario Ministry of Health was unwilling to bring forth new funding. Nothing more was heard of the Scott Report until December 1995, when the Ontario Ministry of Health announced unilaterally that it was offering a $70/h stipend for low-volume (rural) emergency departments, as recommended in the Report. Surprisingly, this was to be "new" money to the system.

This seemed to be a breakthrough, but many communities were not convinced that they wanted to take the package. Some feared the administrative burden of shadow billing. Dispensing and possible clawing back of the fund was perceived to be a potential problem, particularly in areas where there are frequent locums. Some doctors, especially those practising in areas that are

seasonably extremely busy, feel that they should only have to take the stipend for low-volume times and that they should be permitted to continue billing fee-for-service for their high-volume work.

Some communities have said that the introduction of the stipend has made it more difficult to staff their hospitals' emergency departments. Locums who used to come from urban centres to more isolated communities are now able to do paid emergency shifts in small hospitals that are closer to their home base. This is because the $70/h stipend has been applied broadly over the 69 hospitals in northern and southern Ontario.

Another change likely to have an impact in the near future is the Ministry's decision to discontinue its co-payment for Canadian Medical Protective Association (CMPA) fees to Ontario doctors. Formerly, the Ministry gave this co-payment annually to defray the incremental costs of CMPA coverage. This is scheduled to stop next year. The burden will be felt most by those in more technically demanding practices, including rural physicians who do emergency room work, anesthesia and obstetrics. More troubling is the possibility that some of the secondary referral centres that support rural communities will also stop doing obstetrics, leaving us with even less back-up than we have now.

Jim Rourke's recent small-hospital survey found fewer small hospitals provided obstetrics in 1995 than in 1988. At 37 small hospitals still actively providing obstetrics in 1995, there were 227 rural doctors doing deliveries, compared with 266 in 1988. Furthermore, there were 74 GP anesthetists compared to 95 in 1988.[4]

Finally, there is a change in how medical business will be conducted in Ontario. Prior to the passage of Bill 26 the OMA had sole representation rights for all Ontario physicians. The government has now stated its willingness to enter into discussion with groups of physicians, breaking the OMA monopoly. The OMA graciously yielded the Rand formula, stating that "in the absence of representation rights, we had a moral obligation to suspend mandatory collection of dues."[5] Some physicians see this as a divide-and-conquer tactic that will have a negative effect. Many see it as a positive step toward breaking the dominance of the larger sections within the OMA.

In order to clarify what Ontario rural physicians' attitudes are to these impending changes, a survey was undertaken by the Society of Rural Physicians of Canada (SRPC) in January 1996. From the 440 doctors who were registered as "rural" with the OMA Section of Rural Practice, we received 143 responses. The most notable findings were that a significant number of respondents (69.2%) feel that the SRPC should represent their interests. An even greater proportion (90.9%) would like to see the Society at least as an advisory agent for negotiations with the Ministry of Health.

There has been ongoing discussion regarding the continuing medical education budget for rural

physicians, which is currently administered by the OMA. Consideration was being given to the transfer of responsibility for CME and its funding to the academic health science centres. When asked what they thought of this, 29.4% of the survey respondents thought the OMA should continue to administer the program, 1.4% thought that the academic health science centres should be entrusted with the task, and a surprising 74.8% of respondents wanted the SRPC to manage the program. Results of this survey will be forwarded to the Ontario Ministry of Health and the OMA for further discussion.

A final few points. November 1995 saw the first-ever Rural Forum at an annual meeting of the Ontario College of Family Practice. The annual meeting of the OMA Section of Rural Practice followed this. The Section Chairman, Jim Rumball, requested a closer working relationship between the OMA Section of Rural Practice and the SRPC, and called for two SRPC members to sit on the executive of the OMA Section of Rural Practice. A resulting statement of cooperation was published in the SRPC's most recent newsletter.6 It is hoped that this will clarify the relationship between other provincial medical associations and societies and the SRPC.

References

1. Bill 26, The Savings and Restructuring Act, 1st Sess., 36th Parl., November 1995
2. Bill 50, Expenditure Control Plan Statutes Law Amendment Act, 3d Sess., 35th Leg. Ont., 1993: ch 3
3. Scott GWS: Report of the Fact Finder on the Issue of Small/Rural Hospital Emergency Department Physician Service, Ontario Ministry of Health, Ontario Hospital Association, Ontario Medical Association, Toronto, 1995: Mar 22
4. Rourke J: Viability of rural obstetrical practice. Presented at the National Conference on Regionalization of Perinatal Care, London, Ont., Nov. 3, 1995
5. Warrack I: In OMA Fax Network Membership Update, vol 1, no 2, Mar. 1, 1996
6. Rourke J, Babey K, Graham S: SRP and SORP: necessary and complementary. Doc: Soc Rural Physicians 1996; 5 (Spring)

Canadian Journal of Rural Medicine | Journal canadien de la médecine rurale

June 1996 Contents • Juin 1996 Table des matières

Rural practice: Challenging but endangered? A Nova Scotia perspective

Peter Loveridge, MB BS
Glenwood, NS

Can J Rural Med 1996; 1(1); 29

When I finished my residency, 25 years ago in another country, not one of my fellow graduates would have thought about practice in a city. Rural medicine was the preferred option, with every potential position being oversubscribed. It was a universal belief that rural practice gave one the opportunity to practise "real" medicine. The challenge of working without the need to refer every person with an identifiable disease to a specialist was considered to attract the most capable candidates.

The professional challenge and satisfaction of rural practice is entirely different from those of urban practice. I deal with some 300 new hospital in-patients a year, all with acute medical problems such as pneumonia, stroke, ischemic heart disease and malignant disease. I must know a varied range of technical procedures, and most of those procedures are never done by urban family doctors. Patients with chronic medical problems, such as diabetes and rheumatoid arthritis, are handled by me, with assistance from specialists if necessary. Medicine in rural areas truly is comprehensive and continuing care.

However, over the last 10 years in the rural community where I live the number of family physicians has dropped 40%, and we now have more than 3000 people for every rural doctor. At least 5000 of the 30 000 inhabitants are unable to get any primary medical care other than episodic crisis intervention from the hospital's emergency department. And I know we are not alone.

What has gone wrong?

There always has been a gulf between the rural and urban populations of Canada. With increasing urbanization the gulf has widened. Rural values are not given much consideration by politicians until some controversy erupts, such as gun control.

Many medical schools share this indifference to the rural population and bear a heavy responsibility for the present crisis. Rural residents are underrepresented as entrants to medical schools, and the pattern of practice that encourages patient management as a series of interventions by subspecialists is not conducive to turning out rural doctors. Whereas most specialists of my generation or older had experience outside teaching hospitals, in rural communities this is often no longer the case. The inevitable result has been a deterioration in understanding the problems of rural practice.

This deterioration is not confined to general practice. In Nova Scotia we are faced with an impending crisis in the provision of surgical services in outlying areas that is every bit as troublesome as the crisis in the delivery of rural general practice.

The perception that academic centres currently view rural practice and rural practitioners as second-rate is widespread amongst my peers. I have sat on the board of directors of the Medical Society of Nova Scotia (MSNS) for more than a decade and have listened to such gratuitous comments as: "We are going to graduate so many doctors that they will have nowhere to go other than the rural areas" or "These fellows wouldn't be out there if they could make a living anywhere else." And these are the printable ones.

Another more recent disincentive is the current obsession about sexual harassment of patients. Blanket proscriptions of social relationships with anyone who might have been or might become a patient, when this group includes the entire population for a 50-mile radius, don't reflect the reality of rural living and could deter a single doctor who would otherwise have been interested in rural practice.

Current incentive programs

Almost all rural incentive programs target new entrants to rural areas. This process has a number of limitations, not the least of which is the encouragement of recently qualified physicians to come to an area, earn a high income through maximizing fee-for-service payments, and then return to an urban environment as soon as possible. The remaining physicians are then left to deal with the outgoing doctors' patients. The population is not well served either: the incoming physician is often there to "mine" the district rather than to nurture and develop it.

Many incentive programs don't bring short-term recruits to an area. The MSNS has had such a program for 2 years, with two full-time staff people. As of Mar. 6, 1996, it has placed only two physicians, balancing out two who are leaving underserviced areas. The amount of money expended could have, among other things, funded full scholarships for five rural residents to enter medical school.

Why is there such apathy and indifference?

The MSNS is recognized as the sole bargaining agent for physicians in the province (except interns and residents), and dues to this organization have been compulsory since the mid-'80s. The Society has never had a majority vote of the membership to confirm this status, and has only once had a vote to ratify a contract with the government. The Society is seen as neither representative nor accountable by most rural physicians. Even though rural physicians have, on occasion, been presidents or officers of the Society, they don't serve long enough to overcome vested urban interests and the inertia of the Society's bureaucracy. The recently formed section of rural practice has had every one of its proposed incentives vetoed by the section of general practice, which is dominated by urban interests.

About two-thirds of the province's physicians live within 20 miles of Halifax, and the Society has never dealt with underrepresentation for those from remote areas who have difficulty getting to Society meetings. Neither has the Society been able to deal with the ultimate Achilles' heel of our health care system: that the demand for care has outstripped the ability of the public purse to pay for it. Financial constraints do determine the numbers and kinds of physicians and where they practise.

Where can we go from here?

The problems of present-day rural medicine appear overwhelming. Over the last year scarcely a week has gone by in this province without reports of yet another physician leaving rural practice. How can the remaining 70 or so physicians in the province's rural areas ensure that their interests are looked after in the current difficult climate?

It should be clear that the key to survival of rural practice is the adoption of sustainable working conditions and adequate remuneration. Recruiting programs that do not address this are, at best, temporary solutions and are doomed to ultimate failure. There have been a number of studies of the problems of rural medicine, such as Ontario's Scott Report.[1] Many of the remedies proposed in this report are directly applicable to all rural areas in the country.

We can have some influence over our own destiny. We do not need anyone's permission to develop guidelines regarding acceptable hours on call. If a community has too few physicians to provide 24-hour coverage it is not the responsibility of these physicians to burn themselves out and destroy their family life. If such coverage is thought to be in the public interest, the community and its politicians should get together to provide funding and an infrastructure. For example, no rural physician should be expected to work more than 72 hours a week, this being a one-in-four rota.

When the Canadian Medical Protective Association states that fatigue is not a defence for a malpractice action, but that a physician is responsible for continuity of care even if this means being on call for 14 successive days,[2] we can and should take issue with this.

We should also take issue with hospital administrators who expect unreasonable hours of service from their medical staff. It is inconceivable that in 1996 we have to argue about hours of work that were banned by the first factory act in Great Britain in 1832. We can support our colleagues who refuse to work under these conditions, and we can publicize and blacklist the institutions that expect it.

We can also compile objective ratings for our rural communities. It is important for a potential recruit to know the quality of education service, whether the municipal government is supportive of rural medicine, and the attitude of the local hospital administrator. Such information is rarely presented honestly on initial visits. In the present climate this would be a powerful bargaining tool.

Long-term solutions

We need to address all the stages -- from the time a person makes the decision to enter medicine to the time he or she decides to enter rural practice. We need to attract more rural residents to medical school; therefore, even the quality of science education in our high schools needs to be addressed.

At the university level, funding should be linked to the provision of a balanced mix of graduates appropriate to the communities' needs. All medical graduates and all university teachers having direct contact with students and residents should have rural practice exposure. A family medicine department that does not have even one full-time staff member with significant rural experience cannot be expected to give a realistic view of rural medicine to its students.

Funding mechanisms need immediate reform because further across-the-board cuts in fee schedules will destroy the present service in this province. Pure fee-for-service has not served rural doctors well and has resulted in a penalty for looking after the sickest people. This is hardly a good basis for public policy. Fee-for-service has no provision for such things as isolation, degree of clinical responsibility, difficulties getting to a big centre for continuing medical education and locum coverage.

After more than 20 years in practice in rural Nova Scotia and after having been heavily involved in the MSNS I am becoming convinced that the biggest problem of rural practice is not government but the lack of effective representation by our medical societies. It may be impossible to reform these bodies from within, and governments seem ready to impose what they perceive to be solutions. Survival of rural medicine may well depend on direct negotiation with governments and replacement of our present bargaining agents.

References

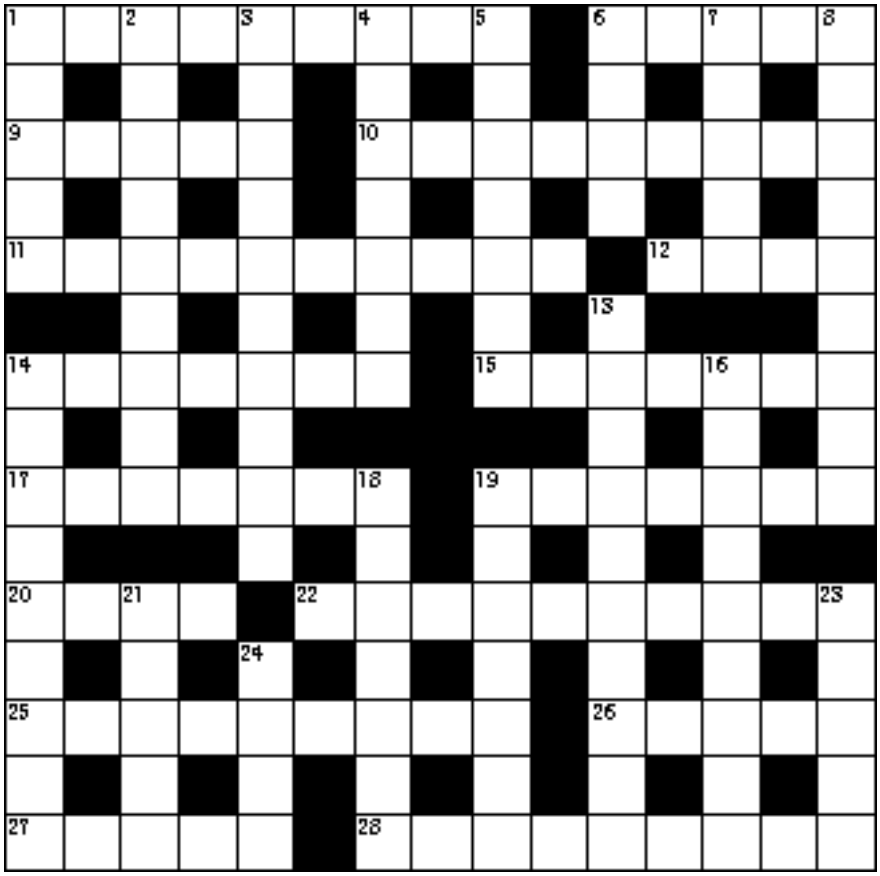
1. Scott GWS: Report of the Fact Finder on the Issue of Small/Rural Hospital Emergency

Department Physician Service, Ontario Ministry of Health, Ontario Hospital Association, Ontario Medical Association, Toronto, 1995: Mar 22
2. Amundson C: Limits to competence: the medico legal aspects [lecture], First Rural/Remote Area Medicine Conference, Montreal, April 1993

Canadian Journal of Rural Medicine
Journal canadien de la médecine rurale
June 1996 Contents • Juin 1996 Table des matières

Cryptic crossword

Lee Teperman
Charteris, Que.



Clues

Across

1. & 11. What rural doctors are to the city -- can they write about peer review's source? (3,4,2,3,7)
6. Doctor possessing a god's understanding (5)
9. Where some victims turn out (5)
10. Fatigue caused by setting lust aside (9)
11. See 1 across
12. No Virginia, the city has a building code? (4)

14. Anesthesiologist's stats? (7)
15. Something fishy solved by medical examiner and springtime in Paris, in a way (7)
17. Such a meeting of noses is insane (7)
19. Region strangely atingle (7)
20. Lower rank of upper body (4)
22. Trust deed? (3,2,5)
25. Transcendentals' medication and an aesthete (9)
26. Nutcracker's revenge, they say (5)
27. End of road and long channel (5)
28. Tiredness peculiar to physicians (9)

Down
1. Foot doctor? (5)
2. Premed is, I worried, thin of skin? (9)
3. Genetics or manipulation of a hormone (10)
4. Geniuses' story supported by Bible's (7)
5. Numbers some trumpet as a panacea (7)
6. Flu-related seizure? (4)
7. Brief illness is a signal to save time (5)
8. Ahead of the curve and almost all of minnisters' finances? (9)
13. UN's fear -- STD may also spread through supplied blood (10)
14. OB needles adapted for a common complaint (9)
16. Method employed to reduce sorrow (9)
18. Family-run AECL organization! (7)
19. Justification for the good doctor's routine (7)
21. Good guy having a day around home (5)
23. Sound becomes sound of stilettos (5)
24. Rich and rummy (4)

Solution

The anatomy of a cryptic crossword

There are many different ways to read a cryptic crossword clue, and finding the right approach is a process of trial and error. The bracketed numbers following each clue represent the number of letters per word in the solution, which can be more than one word. The meaning of a clue taken as a whole is probably, though not necessarily, a red herring.

Most cryptic clues can be viewed as an equation. One side of the equation is the definition. The other side is either another distinct definition or a cryptic construction of the letters in the solution. At times a clue can be solved by identifying the definition, finding a synonym for it and then using the rest of the clue to confirm it. Alternatively, a word may be built from the cryptic

side of the equation and then checked against the clue's definition.

The common types of clues are anagrams, containers, word chains, homophones, curtailments, double definitions and puns. Punctuation and keywords are two types of embedded hints. A question mark following a brief clue may suggest a pun or wry element, and commas may divide a clue, but they may also mislead you to divide the clue in the wrong place.

Embedded keywords help to identify a clue's type and tell the solver how to construct the solution in a very literal fashion; however, there is no sure way to identify a keyword or clue type. The keyword "mix," in the case of an anagram, tells the solver literally to mix the adjacent letters. A container clue might be signalled by a word such as "held," suggesting that one part of the clue holds another part in the solution. A sound or speech-related keyword might suggest a homophone, e.g., "I said" could indicate "eye." Curtailment clues may have a keyword such as "endless" or "partly." Word chains, which link two or more parts to form a solution, do not necessarily have keywords, but a word such as "after" might tell you that one part of a clue goes after another. Double definition clues do not have keywords, but their brevity can indicate this type of clue.

Cryptic crosswords play on the flexibility of the English language, so the solver must be flexible in approaching a clue. Divide clues in different ways and look for different meanings for words within the clue. If one approach fails try another, and another . . . .

Suggestions on solving for first timers

Across
1 and 11. This clue is a word chain and a container. "What rural doctors are" is the definition. "Write about" is the container key.
6. A container clue. "Understanding" is the definition. "Possessing" is the keyword.
9. This is a hidden word. "Where" is the keyword telling you that a synonym for "turn out" actually appears in the clue.
10. An anagram. Fatigue is the definition. "Setting," the keyword, refers to the letters in "lust aside."
11. See 1 across.
12. Curtailment. "Building code" is the definition. "No" is the keyword.
14. Double definition. The question mark suggests an abnormal way of looking at this word.
15. Word chain and container. "Something fishy" is the definition. The second "in" is the keyword.
17. Anagram. The keyword is "insane" and "noses is" the letters for a synonym for "meeting."
19. Anagram. The letters in "atingle," strangely enough, spell this region.
20. Double definition. To lower (another's) rank or upper part of the body.
22. This is merely a pun.
25. Word chain. "Aesthete" is the definition. "Transcendentals" refers to two transcendental

numbers.
26. Homophone. "Say" is the keyword. A word that sounds like what "revenge" is, is also what The "Nutcracker" is.
27. Word chain. "Channel" is the definition. The letter "d" is the "end of road."
28. Anagram. "Physicians" with the same letters as "tiredness." "Peculiar" is the keyword.

Down
1. Double definition. To foot a bill and doctor a patient.
2. Anagram. "Worried" is the keyword calling for change to "premed is I." "Thin of skin" is the definition.
3. Anagram. "Manipulation" is the keyword, "of a hormone" the definition.
4. Word chain. "Geniuses" is the definition. "Supported" suggests a tale on top of the New Testament's.
5. Word chain and curtailment. "Panacea" is literally what "some trumpet."
6. Homophone. "Related" is the keyword. Look for something that sounds like a word for the flu that could be catching.
7. Word chain and container. "Brief illness" is the definition. "Save" is the keyword.
8. Word chain and curtailment. "Ahead/curve/almost all" is the construction.
13. Anagram. The definition is "supplied blood," and "UN's fear STD" the letters to spread.
14. Anagram. This complaint has the "adapted" letters of "OB needles."
16. Pun. A method employed to reduce or a word for sorrow.
18. Anagram. Organization of the letters in "run AECL" will yield a "family organization." The exclamation mark indicates that part of the clue is serving double-duty.
19. Word chain. "Good/doctor's routine" is the construction for a synonym for "justification."
21. Container. "Good guy" is the definition, "around" the keyword.
23. Homophone. "Sound" is the keyword. "Becomes sound" gives a homophone for "stilettos."
24. Lush. Double definition.

Canadian Journal of Rural Medicine | Journal canadien de la médecine rurale

June 1996 Contents • Juin 1996 Table des matières

Into the Canadian wilds

Suzanne Kingsmill, BA, MSc
Shawville, Que.

Can J Rural Med 1996; 1(1): 38

The roar of the rapids was deafening, almost as loud as the butterflies, giddy on adrenaline, that were bashing around inside my gut. Here we were, six doctors and assorted others, including myself, in the wilds of Algonquin Park, in Northern Ontario. We were getting away from it all on the raging waters of the mighty Petawawa; some from the fumes of the city, others from the rustic charms of village life, because as any rural doctor knows, unless you leave you can't get away from it all -- at all. The pessimist among us, I couldn't help wondering, as my husband and I headed into the suck of the current, if we were getting away from it all -- forever. Most of us had never shot rapids before, so mine wasn't an idle thought. We'd had a 15-minute lesson on a fog-enshrouded lake in a torrential downpour just 2 hours earlier. This was our first test. However, our trusty whitewater doctor-guides had assured us that even if we dumped, this set of rapids was not dangerous, just wet. Besides, we did have six doctors to pick up any pieces.

Being in the bow, I was supposed to view calmly the boiling mess of white water with jagged rocks like sharks' teeth creaming the surface ahead of us, then sedately pick the proper route through the mess by drawing with my trusty paddle on either side of the bow, depending on which side was bearing down on something sharp and deadly, all the while keeping a level head in a furiously bucking canoe. Of course, we'd surveyed the rapids from shore and picked the best route, but it looked a lot different in the driver's seat.

It was a fairly easy ride until we were nearly through. Too late, I saw with horror the hidden boulder ahead of us, the water stretching over it like cellophane. I frantically drew left, and we missed the boulder only to slide, ME FIRST, into a gigantic hole that tipped us sideways like a bike in a velodrome. At this point I think I was supposed to do what they call a "high brace" by bravely leaning up and over the heaving high side of the canoe, serenely allowing my weight to bring the canoe back down again and then slamming my paddle face first onto the rushing water while leaning on it briefly to regain the canoe's equilibrium as John, in the stern, did something equally athletic. Instead we both froze, our paddles high in the air as far away from the water as was physically possible. Meanwhile the bottom seemed to fall out of the canoe. We went into

freefall for one suspended second, the canoe on a crazy tilt, before the bow of the canoe slammed down into the water and, as far as I was concerned, never came up again. As if a rug had been pulled out from under our feet, we were suddenly without a canoe, bouncing furiously through the rapids, the raw, wild power of the water tumbling us down through the rocky mess like feathers in a hurricane.

We were fished out of the water once we'd hit calmer climes. Our canoe was pried off a rock. We headed on, looking for a quiet place to camp for the night and to dry out. It was not to be. An entire scouting party of 15 rowdy teenage boys in full hormone mode had pitched camp on the only site for miles. We had to ask them to make room for us on that bug-infested speck of land.

We were supposed to be getting away from it all, but this felt remarkably like the vacation equivalent of a rural roller-coaster ride for a country doctor covering ER on a night with a multiple-trauma highway accident, no back-up and bad weather moving in. Or maybe it was just too much whitewater too soon and too many docs on that particular trip.

We scaled down some of our future trips and weathered the whitecaps of huge northern lakes with walloping head winds, tail winds being as rare as orchids in winter. We added a couple of kids to our family of two. Our friends said it was just to give us more muscle power to carry all our equipment. But since we had to portage the kids too, until they could walk, we couldn't be accused of such callous foresight.

We've battled more than just the elements to get away from it all. Once, on the Spanish River we came barrelling around a corner in a series of tame rapids. We hadn't seen a soul in 4 days. I was in the bow as usual, my heart finally slowing down from the excitement of the last rapids. I found myself frantically drawing over the left bow to pull the canoe away in order to avoid the airplane we were about to hit. It sat like a wounded goose, its pontoons wedged into the rocks, the water sluicing through the cab. Standing on its back, wildly gesticulating, was a man in the throes of what looked like full scale panic.

Every doctor knows the lurch of the heart when arriving first at the scene of a highway accident. The look on John's face said it all as he eyed the man, and I wondered about getting away from it all only to find "it" on the river. But as we approached at breakneck speed, it became obvious that the man wasn't interested in us; he was looking behind us. As we followed his gaze, we saw a helicopter hovering overhead, a rope dangling like an umbilicus from its belly. As the current dragged us swiftly by we learned that he had run out of gas and had had to make an emergency landing the evening before. He had returned to salvage the plane. No injuries.

As Canada's wilderness shrinks, it has become harder to get away from it all. We've camped on a deserted pristine lake, our privacy well earned after a 2-mile portage, only to have a group of fishermen land in a float plane, haul out their stashed boats and troll back and forth in front of our island, ostensibly looking for fish but more interested in what the hell we were doing there with

kids. I've known more privacy at the corner of Toronto's Bloor and Yonge.

Once, at 6 pm in the middle of a rainstorm, we were paddling with five sodden children and four adults across a lake to a possible campsite, only to be told that, even though it was Crown land, we couldn't camp there and must paddle five miles to the next lake. His nibs circled us, like a vulture, in his motorboat for half a silent hour as we ignored the order and continued to paddle to the closest piece of land -- a sloping hill of 30f. It made for an interesting night of vertical camping, with our youngest son migrating out of the tent in the middle of the night. We had to pin his sleeping bag to the bottom of the tent and woke to the incessant buzz of the motor of our self-appointed landlord.

So why do we keep trying to get away from it all if "it" seems to follow us like a magnet? Because on every canoe trip the good times far outweigh the people-crowded times, portage back-breaking times, bug-infested times, rapids-dumping times, and the good times are made better for having conquered the rest as a family team. The quiet, gentle things that happen, which make up the bulk of most canoe trips, are not as easily told because they are often just warm feelings or disjointed images: the spectacular leap of a gigantic woman-sized sturgeon ("It's a dinosaur, Dad!"); the colours of the setting sun reflecting from its prehistoric skin; an osprey diving feet first for a fish and struggling to rise, the fish jerking in its talons ("It's got a fish, Mum! No! Wait! The fish has got it!"); a beaver surfacing so close to the canoe that when it frantically dived and slapped its tail in alarm we all got wet; a young bear cub visiting our tent at dawn ("Will he hurt us, Mum?"); a bald eagle taking flight from beneath our noses as we tied the canoe five feet away ("Hey! It's head isn't bald! It's got feathers!"); swimming from a sun-soaked rock and cooling down under a northern waterfall; watching as a dozen 3-lb pickerel circle a hook baited only with a raisin and laughing as the kids struggle to land one just as the hook comes out; talking endlessly by the light of a campfire; lying on our backs at midnight and watching the northern lights; playing bridge on rainy, windbound days in our tent -- making memories that will last a lifetime. No phones, no fax, no email, no tv, no beepers, no on-call, no cars, no computers, no doorbells, no radios, no demands on anyone's time; nothing but the rising sun, the water, the rhythm of the paddles and your friends. Now that's getting away from it all.

Canadian Journal of Rural Medicine | Journal canadien de la médecine rurale

June 1996 Contents • Juin 1996 Table des matières

RuralMed

RuralMed is an Internet email discussion group dedicated to rural medicine. It was established by the Society of Rural Physicians of Canada in April 1995, with the cooperation of the McGill University Computing Centre. Although its focus is Canadian, its membership is international.

One of the many topics under debate since the fall of 1995 has been the provision of rural anesthesia. Several articles in the Canadian Medical Association Journal in November 1995[1-3] and subsequent letters[4,5] sparked a lively discussion on RuralMed.

There was disagreement on whether western Canada needs to train GP anesthetists. Some sources suggest there are not enough positions even for specialist anesthetists. It was noted, however, that in many rural areas there is not enough volume for a specialist to make a fee-for-service living, and in these areas the role of GPs with extra training is easy to defend. Regionalization has brought into question the viability of some rural surgical/anesthetic services. The following question was posed: "How big does a community need to be, or how far from a regional centre, before it has a 'right' to basic surgical or obstetrical hospital services?"

The training of GP anesthetists was discussed, with a call for national standards and for the involvement of rural physicians in setting these standards. It was noted that in Ontario it is now very difficult to get 3rd-year anesthesia training positions. It was suggested that as older GP anesthetists retire there will be no one to replace them.

This led to a discussion of the actual experience of rural GP anesthesia. One participant commented that the level of anesthesia and obstetrics in rural communities tended to be high and complications infrequent. There was also speculation about the positive effects on patients' recovery when they are in the presence of physicians and nurses known to them, and the positive effects of proximity of family. These factors would be worthy of study in the rural context.

Rural obstetric anesthesia was the subject of another anesthesia thread. There is clearly no absolute consensus as yet about the role of epidural anesthesia in the management of labour, especially in the rural contxConflicting claims about the effect of epidurals on the progress of labour abound. References were cited linking epidural anesthesia to an increased incidence of instrumental delivery. Other evidence was put forward suggesting a lack of association. The issue is clearly complex. Again, the suggestion was made that the context of the epidural (i.e.,

supportive, familiar surroundings) was also important.

These aspects aside, it was noted by several participants that provision of epidural services in a rural area is difficult at the best of times. Many GP anesthetists working in rural areas are already on call frequently for surgery and are reluctant to provide an "epidural service," wary of the toll on their families and their personal time. As a result some areas provide epidurals only when labour is "prolonged and complicated." Nevertheless, the provision of the service is described by one physician as leading to "huge professional and maternal satisfaction."

The introduction of a new, combined spinal epidural technique [described by Iglesias on pages 15-18 of this issue] was discussed, with the suggestion that this technique might open the door to the involvement of nonanesthetist family practitioners in the provision of the service.

References

1. Chiasson PM, Roy PD: Role of the general practitioner in the delivery of surgical and anesthesia services in rural western Canada. Can Med Assoc J 1995; 153: 1447-1452
2. Inglis FG: Surgical care in rural Canada: training and planning for the future. Can Med Assoc J 1995; 153: 1453-1454
3. Barry AW: Meeting the challenge: providing anesthesia services in rural hospitals. Can Med Assoc J 1995; 153: 1455-1456
4. 4Whiteside C: UBC program meets rural medical needs. [letter] Can Med Assoc J 1996; 154: 631-632
5. Kearney RA, Gray DP: Need for GP anesthetists. [letter] Can Med Assoc J 1996; 154: 300

Canadian Journal of Rural Medicine | Journal canadien de la médecine rurale

June 1996 Contents • Juin 1996 Table des matières

Literature

Rural obstetrics in NSW. Wollard LA, Hays RB. Australian and New Zealand Journal of Obstetrics and Gynecology 1993; 33 (3): 240-242

The safety of obstetrics in rural areas has been, and remains, a controversial issue.

In this paper Wollard and Hays compared 5950 deliveries conducted by rural GPs in New South Wales, Australia, during 1990-1991, to the nearly 90 000 deliveries conducted in NSW as a whole during the same period. The authors found that the outcomes of both groups were comparable. They stated: "No evidence that obstetrical care in accredited rural GP obstetric units is of less than acceptable standards, could be found." Noting that these units are a rich source of experience for GPs in training, they went on to state: "There is scope to increase the use of rural obstetric units for the training of future rural GP obstetricians."

This recent evidence adds support to the belief that rural women can demand that their obstetric care be provided close to their own communities and that they can expect this care to be safe and of a high standard.

Management of labour in an isolated rural maternity hospital. Baird AG, Jewell D, Walker JJ. British Medical Journal 1996; 312: 223-226

In a recent UK retrospective study of a rural maternity unit 120 km from the nearest consultant maternity unit, 997 consecutive deliveries managed by midwives and GPs were audited. Mode of delivery, complications, medical interventions and transfers were quantified.

Fifty-three percent of the women (530) were classified as low risk and were booked for elective delivery at the rural unit. In spite of this attempted screening, 12.8% subsequently had an unplanned transfer, and 3.8% required a cesarean section. Among the 462 women who remained for delivery in the low-risk unit, 5% required the application of forceps, and 7% had significant postpartum complications.

This study demonstrates that at a relatively isolated unit, in spite of an attempt to limit deliveries to those in a low-risk category, nearly one-third of the deliveries required intervention (either by

the GPs in the unit or at the consulting unit 120 km away) for an unanticipated difficulty. Although this study did not assess outcomes in a comparative way, it suggested that "a team approach to obstetric management" be emphasized so that complications can be dealt with appropriately and in the appropriate setting.

Procedural medicine: Is your number up? Jackson WD, Diamond MR. Australian Family Physician 1993; 22 (9): 1633-1639

Maintenance of competence is a current preoccupation of regulators and educators at the local, provincial and national levels. In their review of the literature pertaining to procedural competence, Jackson and Diamond recognized one of the basic features of rural practice: namely, its requirement for procedural skills that may only be practised infrequently.

The authors reviewed the literature relating to psychomotor-skill preservation and argued that "there is little or no evidence to justify the judging of competency by numbers of procedures performed." They noted that numerous studies on three continents have documented the safety of obstetrical practice in rural hospitals with low delivery numbers, and they suggested that "the extent of initial training is more important than the frequency of continuing practice." This conclusion should resonate among those who organize the training of physicians headed for rural practice.

Canadian Journal of Rural Medicine | Journal canadien de la médecine rurale

June 1996 Contents • Juin 1996 Table des matières

Letters

Endotracheal intubation in trauma patients

Many patients from rural areas who survive major facial trauma owe their good fortune to the physician who first sees the patient, recognizes the potential for airway obstruction and performs pre-emptive endotracheal intubation. That physician is often a GP-anesthetist.

Prior to anesthesia for elective surgery, many anesthetists are in the habit of shortening the endotracheal tube so that it protrudes just beyond the lips, to prevent it kinking or slipping down the right mainstem bronchus. However, this practice should not be carried over into the trauma setting.

In a recent case managed at our institution, a 34-year-old woman presented with facial fractures, lip lacerations and a comminuted fracture of the shaft of femur. She had been intubated when first seen, but the endotracheal tube had been shortened to 23 cm. She underwent a 6-hour surgical procedure in the lateral decubitus position for her femoral injury, during which vigorous fluid therapy was needed. Her facial swelling, already considerable, was made much worse. Her lips began to cover the attachment of the tube to the breathing system, and the circumferential tapes that held the tube in place cut deeply into the cheeks. Direct laryngoscopy was predictably impossible, and an attempt to change the tube over a stylet failed. The patient subsequently required an urgent tracheostomy.

Had the tube been left at its original length, it would have been easy to remove the tapes and re-secure it more loosely to allow for the swelling.

I urge all physicians managing trauma patients to bear this point in mind.

Saifudin Rashiq, MB, FRCPC
Consultant Anesthetist
University of Alberta Hospitals
Edmonton, Alta.

The new journal of rural medicine

The publication of the first issue of the Canadian Journal of Rural Medicine is a milestone for the enlarging network of rural family physicians in our country. As chair of the Department of Family Medicine at McGill University, I am proud that this work has been spearheaded by the group of practitioners in Shawville, Que., which is one of the rural sites for our residents.

There is a need to address the issues related to rural practice at many levels in the continuum of medical education. We are witnessing an increasing trend in undergraduate medical education to incorporate experiences in rural settings as part of the core training. Residency programs in family medicine have the responsibility to ensure that all trainees are prepared for rural practice through core curriculum experiences provided both in urban and rural sites. Faculties of medicine must develop methods to deliver continuing medical education to practitioners in rural regions that will keep them up-to-date with developments in the many areas related to patient care.

This journal provides an opportunity for rural physicians to share and discuss issues that are of common concern. Our department thanks those who have been involved in its development and wishes them success.

Louise Nasmith, MD CM, CCFP, FCFP
Associate Professor and Chair
Department of Family Medicine
McGill University
Montreal, Que.

The new journal of rural medicine

Congratulations on getting the first issue of the Canadian Journal of Rural Medicine into production. It's a really exciting concept and may provide a venue for some lively debate on all of the issues facing rural doctors.

The Rural Ontario Medical Program is always looking for new ways to spark residents' interest in rural medicine. This will be another tool that we can use. Who knows, we might be able to interest residents in contributing articles and perhaps even having their research published. What a great opportunity for family medicine to show its stuff. We look forward to receiving future issues.

Peter Wells, MD
Director
Rural Ontario Medical Program
Collingwood General & Marine Hospital
Collingwood, Ont.

Canadian Journal of Rural Medicine | Journal canadien de la médecine rurale

June 1996 Contents • Juin 1996 Table des matières

Stethos on steroids

Gordon I. Brock, MD, CCFP
Temiscaming, Que.

Can J Rural Med 1996; 1(1): 46

My first impression on opening the box advertising the world's first, entirely electronic stethoscope is that the Stethos looks like a standard stethoscope on steroids. It weighs 156 g, compared with 112 g for my Littman Classic, but it feels much heavier around the neck, partly due to the massive diaphragm-only head, which contains the electronics and controls. According to the manufacturer's booklet it uses "high-tech stereo systems" technology to "selectively" amplify and "balance" the sound for the "response of the human ear."

There is no "bell" on the Stethos Electronic Stethoscope. The diaphragm operates in either "bell mode" (selective amplification of low tones) or "diaphragm mode" (amplification of high-pitched tones) by means of a selector button, which doubles as the on/off switch. Volume may be adjusted up to 16-fold, and the unit is powered by a battery that has a lifespan of about 1 year under normal usage. The tension of the arms is controlled by a simple roller, a feature I found helpful.

The large size of the diaphragm makes the Stethos impractical for cardiac auscultation in small children. It represents overkill for blood-pressure measurement, and I found assessment of breath sounds difficult due to the volume control.

Assessing heart murmurs is this stethoscope's forte, and it makes a huge difference. Listening to my patients with heart murmurs made it easy to hear what the cardiologists mean by the terms "diamond-shaped," "rumbling" and "pansystolic." With the Stethos, the murmurs are louder and much clearer, and there is less interference from ambient noise. All that was missing was an electronic voice identifying "aortic stenosis" or "mitral regurgitation."

After 1 week, I began to get used to the extra weight of the Stethos. However, I left it in my examining room when I went on hospital rounds and home visits and took my Littman Classic instead.

If you are happy with your cardiac auscultation skills using your present stethoscope, I see little need to rush out and buy a Stethos Electronic Stethoscope. If you wish to improve your cardiac auscultation skills or have a large number of cardiac patients in your practice, I feel this stethoscope is well worth the price.

Stethos Electronic Stethoscope. $390.00 plus tax. Manufactured by Theratechnologies, Inc. Medical Devices Division. PO Box 191, Succ. St-Michel, Montreal QC H2H 3L9; tel: 514 729-7904

Canadian Journal of Rural Medicine | Journal canadien de la médecine rurale

June 1996 Contents • Juin 1996 Table des matières

Reader Survey

Dear Readers:

The editors of the Canadian Journal of Rural Medicine (CJRM) welcome your feedback about our inaugural issue. We also want to define the rural medical community to ensure that we appreciate your needs as a journal reader. Please print out this page, complete the survey, and return it to CJRM, Box 1086, Shawville, QC J0X 2Y0 (fax: 819 647-2845) by Aug. 15, 1996, so that we can share the results with you as soon as possible. Thanks.

Please check the appropriate spaces.

(A) ABOUT YOU

(1) How many years have you been in practice?
__ 5 or less __ 6-15 __ 16-20 __ More than 20

(2) What size is the community in which you practise?
__ Less than 1,000 __ 1,000-5,000 __ 5,000-10,000 __ More than 10,000

(3) What size is the population that is served by your community hospital?
__ Less than 5,000 __ 5,000-15,000 __ 15,000-20,000 __ More than 20,000

(4) Does your practice include hospital care?
__ Yes __ No

(5) Do you practise obstetrics?
__ Yes __ No

(6) Do you do ER?
__ Yes __ No (please proceed to question 7)

If yes, how many times are you on call per month?
__ 5 or less __ 6-10 __ 11-15 __ More than 15

(7) Do you have any specialist back-up?
__ Yes __ No (please proceed to question 8)

If so, please describe
_____
_____

(8) Through what means do you obtain your continuing medical education?
__ Medical journals __ Colleagues
__ Conferences __ The Internet
__ CME courses __ Other (please specify)

(9) Which of the following drug information sources do you use?

__ Personal visits by a pharmaceutical representative?
How frequently? __ Every month __ Every 3 months __ Every 6 months __ Once a year

__ Information received indirectly through a pharmaceutical representative?
How often? __ Every month __ Every 3 months __ Every 6 months __ Once a year

__ Direct mail advertising? How many pieces do you receive each week?
__ 0-5 __ 6-10 __ 11-15 __ 16-20 __ More than 20

__ Advertisements in medical journals

__ Other (please specify)
_____

(B) ABOUT THIS ISSUE OF CJRM

(10) How much time did you spend reading this issue?
__ 15 min or less __ 16-30 min __ 31-45 min __ More than 45 min

(11) Please rate the design of this issue on a scale of 1 (low) to 5 (high)_____

(12) Which article was most valuable to you, as a rural physician?
_____

(13) Please rank from 1 (least) to 10 (most), the value/interest of the following:

Value/Interest

____/____ Editorial: A new venture
____/____ Éditorial: Un nouveau projet
____/____ Editorial: Ambulatory epidural analgesia
____/____ Commentary: The Society of Rural Physicians
____/____ Original Article: Ambulatory epidural analgesia
____/____ The Practitioner: Country cardiograms
____/____ The Practitioner: The occasional chest tube
____/____ Regional Review: Focus on Ontario
____/____ Destination: Into the Canadian wilds
____/____ Podium: Doctors Speak Out

(14) Please rank from 1 (least) to 6 (most), the value/interest of the following:

Value/Interest
____/____ Cryptic crossword
____/____ Letters
____/____ RuralMed
____/____ Literature
____/____ Odds 'n Ends
____/____ Classified Advertising

(15) What suggestions do you have for improvements to the format/content of the journal?

_____
_____
_____
_____

(16) What other departments would you like to see?

_____
_____
_____
_____

(C) OPTIONAL (We would appreciate this information for possible follow-up of your ideas. However, be assured that your individual responses will be kept confidential by those analysing the data. Only aggregate results will be made public.)

Name:_____

Address:

_____
_____
_____

Tel:_____
Fax:_____
email:_____

Canadian Journal of Rural Medicine | Journal canadien de la médecine rurale

RuralMed

RuralMed is an Internet email discussion group dedicated to rural medicine. It was established by the Society of Rural Physicians of Canada in April 1995, with the cooperation of the McGill University Computing Centre. Although its focus is Canadian, its membership is international.

To participate in RuralMed you must be able to send and receive email. Subscription is by request to the listowner. Simply send a message to admin@srpc.ca.

Include your full name and email address. If you include a short biography it will be posted to the list as your introduction. You can also access both the RuralMed archives and a RuralMed subscription form through the SRPC home page.

Canadian Journal of Rural Medicine | Journal canadien de la médecine rurale

Society of Rural Physicians of Canada

The Society of Rural Physicians of Canada (SRPC) was incorporated in 1992 by a group of doctors to promote sustainable working conditions for rural physicians. The working principle is that Canada's rural population must have access to excellent health care delivered by a stable, well-trained, well-equipped and rested medical staff.

The SRPC is working toward that goal by developing policies for improving the delivery of health care, by championing rural medicine through the media and by interacting with federal and provincial governments, medical schools and professional medical associations across the country.

Among the Society's functions and accomplishments are:

- publishing the first issue of CJRM in June 1996;
- developing ideas and policies for improving the delivery of health care to rural areas, and advocacy of those ideas through the media and at the government, medical school and professional organizations level;
- supporting rural doctors and communities in crisis;
- promoting relevant, useful continuing medical education, including a national annual course in rural medicine;
- encouraging and facilitating research into rural health questions;
- publishing the Canadian Journal of Rural Medicine
- providing a Library of Rural Medicine (www.srpc.ca/library.html) and RuralMed, an electronic mailing list to function as a discussion forum (to subscribe send an email to admin@srpc.ca and include your name and the words "Subscribe RuralMed"), and a web site (www.srpc.ca);
- developing rural paractice guidelines;
- establishing a Rural Elective Registry;
- developing curriculum papers for Advanced Skills:
- working with other medical associations, colleges, universities and licensing bodies to further rural medicine
- fostering communication among rural physicians and among other groups with an interest in rural health care; and
- attending provincial rural forums and organizing a national one.

We welcome membership from communities, educators, researchers, administrators, and all rural doctors — anyone with an interest in rural medicine. Use the following application form to join the Society or use the online form at www.srpc.ca/emembers.htm

SRPC MEMBERSHIP APPLICATION / DEMANDE D'ADHÉSION À LA SMRC

Annual (2003) fees/Cotisation annuelle (2003)

Active members/Membres actifs : $250
Students and residents/Étudiants et résidents : free/gratuit
Life members, age 65+, and retired/Membres à vie, 65 ans et plus, et retraités : $50
Associate members (non-MDs)/Membres associés (non médecins) : $100
Affiliate members/Membres affiliés : $500

Please make cheques payable to SRPC and mail to/Veuillez faire votre chèque à l'ordre de la SMRC et les poster à :

SRPC Membership
Box 893
Shawville QC
J0X 2Y0

Name/Nom : _____

Address/Adresse : _____

_____

Tel/Tél : Office/Bureau : _____

Fax : _____

Home/Domicile : _____

E-mail/courr. élect. : _____

Are you/Êtes-vous : rural GP/OP rural ( ); rural GP specialist/spécialiste OP rural ( ); specialist/spécialiste ( )

Please tell us about yourself/Parlez-nous de vous :

_____

_____

_____

PLEASE JOIN US. YOUR MEMBERSHIP IS WHAT KEEPS US GOING.

It is your voice, your ideas and your support as rural doctors that will give the SRPC the strong voice it needs to address the problems facing rural medicine today.

Officers

President
Jill Konkin, MD
Jasper, Alta.
jillk@telusplanet.net

Past-President
Peter Hutten-Czapski, MD
Haileybury, Ont.

Vice-President
Keith MacLellan, MD
Shawville, Que.

Vice-President Elect
Joshua Tepper, MD
Locum-at-large

Secretary
Trina Larsen Soles, MD
Golden, BC

Secretary-Elect
Alan Ruddiman, MD
Oliver, BC

Treasurer
David Butcher, MD

Yellowknife, NWT

Treasurer-Elect
David Howe, MD
Parrsboro, NS

Member-at-Large
Joshua Foley, MD
Burin Bay, Nfld

Administrative Officer
Lee Teperman
SRPC Office, Shawville, Que.

SRPC
Box 893
Shawville QC
J0X 2Y0
Tel/fax 819 647-3971
admin@srpc.ca

Canadian Journal of Rural Medicine | Journal canadien de la médecine rurale

Welcome to the online edition of the Canadian Journal of Rural Medicine (CJRM), the official journal of the Society of Rural Physicians of Canada.

- Current issue: Summer 2003
- Next issue: Autumn 2003
- Back issues
- Instructions for authors
- RuralMed
  Internet email discussion group dedicated to rural medicine

- How to advertise in CJRM
- How to subscribe
- Editorial staff
- Send comments
- Service information

ISSN 1488-237X

Canadian Journal of Rural Medicine | Journal canadien de la médecine rurale

June 1996 Contents • Juin 1996 Table des matières

Country cardiograms: Case 1
Pericarditis

Can J Rural Med 1996; 1(1): 26

Findings

The electrocardiogram (ECG) showed normal 1 mV/cm Y-axis standardization and normal sinus rhythm. There is a nonspecific rSR´ complex in lead V1. The abnormal findings are widespread nonspecific ST depression in many leads, PR depression in lead II and perhaps some precordial leads, and PR elevation in the aVR lead. These findings suggest pericarditis. The classical early findings of acute pericarditis are widespread ST elevation and the PR changes that were seen in this patient's ECG. The ECG generally shows more localized ST elevation in ischemia secondary to coronary artery disease. In this patient the ST segments are depressed, but atypical ECG findings are not uncommon in pericarditis.

On requestioning, it became clear that the patient's pain was typical of pericarditis: she noticed that the pain was worse with respiratory movements, with every heartbeat and when she was supine, and that it was relieved by sitting forward. She became certain that the pain had been constant for at least 24 hours, without going away at all during that time. The important differential diagnosis was myocardial ischemia.

Discussion

Uncomplicated pericarditis can be treated locally in most rural settings, but geography was an important factor in this case. The patient lived a long way from our hospital, the winter weather was poor, and local ambulance service was intermittent. We were concerned about the development of complications, such as cardiac tamponade or arrhythmia, and we were still concerned about the possibility of ischemia. We decided to admit her to our hospital. We sent the ECG by fax to an on-call urban cardiologist at his home during a telephone consultation. He agreed with the diagnosis and our plans for management. He also agreed that the most likely cause was viral illness.

Although the risk of complications appears to be low in viral pericarditis, we needed more

precise estimates to aid our decision about whether to discharge the patient home, admit her to our rural hospital for observation or transfer her elsewhere. We used Grateful Med to perform a computer search of the medical literature in Medline. We found no studies of acute pericarditis in rural settings and little information that would help us to predict the risk that complications might develop over subsequent days. We therefore decided to admit the patient to our hospital for observation, pain relief, serial electrocardiography and serial testing of cardiac enzymes.

We used our clinic computer to search for further information about the patient's management. We found help on the Internet at the Web site called "Topics in Primary Care" (http://uhs.bsd.uchicago.edu/uhs/topics/acutepericarditis.html), which is maintained by the University of Chicago. The advice we found there gave us further confidence in our course of action by supporting our diagnosis and reaffirming our management options. The Scientific American Medicine CD-ROM (SAM-CD)1 provided a more detailed pathophysiological discussion. Neither source gave precise estimates of the risks of serious complications.

Patients with viral pericarditis usually need only symptomatic therapy to control pain. If simple measures fail, one option is to give indomethacin (50 mg four times daily, tapered over 4 weeks to about 25 mg daily).

If nonsteroidal anti-inflammatory drug therapy is contraindicated or not tolerated, then another option is to give prednisone at 20 to 60 mg/day, tapered over 2 to 4 weeks. Because this patient had significant ulcer and gastroesophageal reflux disease, we treated her pain with narcotic medication and observed her.

Over the next few days the patient's ECG normalized, the pain diminished, and there was no evidence of myocardial injury in cardiac enzyme studies. She was discharged home for weekly follow-up in our family practice clinic over the next month. The pain resolved fully in 2 weeks. The ECG returned to normal without the T-wave inversions often seen in pericarditis, suggesting that this may have been a mild case. We elected not to send the patient to the city for echocardiography to look for effusion, because the clinical history and exam showed no sign of tamponade. The patient was warned about the moderate risk of recurrence.

Reference

1. Scientific American Medicine [CD-ROM], Online Computer Systems, June 1995

Canadian Journal of Rural Medicine
Journal canadien de la médecine rurale

June 1996 Contents • Juin 1996 Table des matières

Cryptic crossword solution

Across
1 & 11. The best in the country
6. Grasp
9. Evict
10. Lassitude
11. See 1 across
12. Gene
14. Numbers
15. Mermaid
17. Session
19. Genital
20. Bust
22. Act of faith
25. Epicurean
26. Suite
27. Ditch
28. Residents

Down
1. Treat
2. Epidermis
3. Estrogenic
4. Talents
5. Nostrum
6. Grip
7. Acute
8. Prebendal
13. Transfused
14. Nosebleed
16. Attrition
18. Nuclear
19. Grounds
21. Saint
23. Heels

24. Lush

Canadian Journal of Rural Medicine
Journal canadien de la médecine rurale
June 1996 Contents • Juin 1996 Table des matières

Combined spinal epidural analgesia for labour: a formula

1. Preload with 500 mL isotonic intravenous solution.
2. Insert epidural needle at L2-L3 or L3-L4 as with traditional technique.
3. Insert a long (41Ž2 in.; 11.8 cm) 25- or 27-gauge Whitacre or Quincke needle through the epidural needle into the cerebrospinal fluid (CSF). If you do not have the long spinal needles, you can do the spinal injection first. The track made by the spinal needle will not interfere with placement of the epidural needle.
4. Identify the CSF, and then inject 1.0 mL of 0.25% bupivacaine hydrochloride (for epidural use; no epinephrine) combined with 25 µg fentanyl citrate (0.5 mL) and dilute with 0.5 mL saline. The total volume is 2 mL. If you are unable to identify the CSF, the needle may simply be off to the side of the epidural space. Alternatively, some anesthetists use only fentanyl (37.5 µg) intrathecally with good effect.
5. Withdraw the spinal needle and thread the epidural catheter according to the usual technique.
6. After the spinal analgesia has been started and the epidural catheter placed, a low-dose continuous infusion of 0.05% bupivacaine is initiated. Remove 24 mL from a 100-mL saline bolus. Add 20 mL 0.5% bupivacaine (0.10% final concentration) and 4 mL fentanyl (200 µg; 0.0002%). Run the mixture of 0.10% bupivacaine/0.0002% fentanyl at 10 mL/hour with an infusion pump.
7. Monitor the mother's blood pressure and pulse, as well as the fetal heart rate every 5 minutes for 20 minutes. Then monitor blood pressure and pulse every 30 minutes and fetal heart rate every 15 minutes.
8. After 30 minutes, test the mother for hypotension. If absent and if she feels that she can walk, test for motor block by asking her to stand and to attempt, while attended, a partial knee bend. If she is successful, encourage her to walk and (or) sit in a chair for the duration of labour.
9. Some centres discontinue the intravenous infusion (or use a saline lock) if the patient successfully walks after 30 minutes.
10. Subsequent top-ups, if required, involve considerably smaller doses than expected with conventional epidural techniques. Dilute 5 mL of 0.25% bupivacaine with 15 mL saline in a 20-mL syringe. Give 10 mL by test dose plus slow bolus. Repeat in 20 minutes if analgesia is inadequate. Remember: a top-up should be provided promptly, because onset is very slow with such dilute concentrations.

Return to text

Canadian Journal of Rural Medicine | Journal canadien de la médecine rurale
June 1996 Contents • Juin 1996 Table des matières

Guidelines to the practice of anaesthesia, as recommended by the Canadian Anaesthetists' Society, 1993 edition*

Experience since publication of the guidelines in the September 1986 issue of the CAS Newsletter has shown that the incidence of major complications associated with continuous low-dose epidural infusion for obstetrical analgesia is extremely low.

Consequently, it is not necessary for the anaesthetist to remain physically present or be immediately available during maintenance of continuous infusion epidural analgesia provided:

- an appropriate protocol for the management of these epidurals is in place;
- an anaesthetist can be contacted for the purposes of giving advice and direction.

In contrast to continuous infusion epidural analgesia, bolus injection of local anaesthetic into the epidural space can be associated with immediate life-threatening complications. In recognition of this, the CAS recommends that:

- When a bolus dose of local anaesthetic is injected into the epidural space, an anaesthetist must be available to intervene appropriately should any complications arise.
- The intent of the phrase "available to intervene appropriately" is that individual departments of anaesthesia shall make their own determination with regard to availability and appropriateness. This determination must be made after each individual department of anaesthesia has considered the possible risks of bolus injection of local anaesthetic and also methods of dealing with any emergency situation that might arise from the performance of the procedure in their facility.

*Reproduced with the permission of the Canadian Anaesthetists' Society.[9]

Return to text