Letters to the editor

J Anesth (1997) 11:170-171; ©JSA 1997

RE: Yamada K, Ishihara Y, Saito T: Relief of intractable perineal pain by coccygeal nerve block in anterior sacrococcygeal ligament after surgery for rectal cancer. *J Anesthesia* (1994)8:52–54

Richard B. Patt1 and Ricardo Plancarte2

- ¹ Anesthesiology and Neuro-Oncology Deputy Chief, Pain and Symptom Management Section Director Anesthesia Pain Programs, University of Texas M.D. Anderson Cancer Center, Houston, TX 77030, USA
- ² Pain Management and Critical Care, National Institute of Cancer, Mexico City, Mexico

To the editor: We read the recent report of Yamada and colleagues [1] regarding a "new method" of managing intractable perineal pain with considerable interest. Yamada's group described a series of seven patients with intractable perineal pain after rectal surgery for cancer managed with a novel technique of neural blockade. The authors describe inserting a needle through the sacrococcygeal ligament, and guiding its passage under fluoroscopic control so that its tip came to lie ventral to the sacrococcygeal junction. Following the administration of contrast medium and local anesthetic, 1ml of absolute alcohol was injected, resulting in analgesia persisting for an interval of 3-11 months and an absence of adverse effects (sensory anesthesia, motor weakness, incontinence). They postulate that the mechanism underlying the success of this intervention was destruction of the anterior branches of the coccygeal nerve, and refer to cadaver work as confirmatory evidence.

The predominant mechanism for the ouctome achieved in this clinical study may indeed relate to blockade of the coccygeal nerve, or, alternatively, it may relate to an aberrant loop of the nerve that, according to the dissections performed by the authors, is an inconstant finding. We wish to draw your readers' attention to another possible mechanism that may help explain the observations of Yamada and colleagues.

Anatomic descriptions of the neuroanatomy of the sacrococcygeal region, unfortunately, are often superficial, and conflicting, and are confounded by a lack of standard nomenclature. We believe that the distal presacral compartment

referred to in the report of Yamada et al. [1] is best regarded as the caudad-most portion of the retroperitoneal space, which contains the unpaired termination of the sypathetic chain, referred to variously as the ganglion impar or ganglion of Walther [2]. We have reported blockade of the ganglion impar, using a slightly different anatomic approach from that described by Yamada et al. [1] for the treatment of perineal pain in patients with cancer, with similar results [3–5]. We feel that the technique in question is better explained in terms of blockade of sympathetic fibers, based on the absence of sensory, motor, and sphincter changes, and an absence of postprocedural neuritis. In addition, we question whether the distribution of the anterior branches of the coccygeal nerve is sufficient to explain the excellent results observed for perineal pain, which is a complex entity that often involves contributions from diverse structures of mixed innervation. Further, the ganglion impar's location in the distal retroperitoneum is more consistent with the spread of contrast medium in a potential space depicted (and apparent lack of resistance to injection), than would be injection near the coccygeal nerve, which nerve is more closely associated with ligament and muscle.

Our technique differed in some important ways from that which has been described by Yamada et al. [1], predominantly in that we approached the pre-sacroccygeal region from a more distal entry point (between the anus and the tip of the coccyx), and negotiated the sacrocccygeal curvature by means of a (manually) bent spinal needle that traversed the anococcygeal ligament.

Independent of the mechanism that underlies the pain relief, we believe that the technique described by Yamada and colleagues has extreme clinical relevance, as present methods of controlling perineal pain of neoplastic origin often yield unsatisfactory results, characterized by one authority as as a "trade-off between pain relief and complications—with or without pain-relief" [6]. We would be most interested in the opinions of Yamada, and colleagues regarding the issues raised in this letter.

References

 Yamada K, Ishihara Y, Saito T (1994) Relief of intractable perineal pain by coccygeal nerve block in anterior sacrococcygeal ligament after surgery for rectal cancer. J Anesthesia 8:52–54 Letters to the editor 171

- Pick TP, Howden R (eds) (1978) Anatomy, descriptive and surgical, by Henry Gray, 15th eds. Bounty Books, New York, pp 798– 800
- 3. Plancarte R, Amescua, Patt RB (1990) Presacral blockade of the ganglion of walther (ganglion impar). Anesthesiology 73:751
- Plancarte R, Velazquez R, Patt R (1993) Neurolytic blocks of the sympathetic axis. In: Patt R (ed) Cancer pain. JB Lippincott, Philadelphia, pp 377–425
- 5. Plancarte R, Patt RB, Allende S, Amescua C, Reddy S. Treatment of neoplastic perineal pain by presacral chemical blockade of the ganglion impar (ganglion of walther). Reg Anesth
- Milano R: (1991) Pelvic pain: Problems in diagnosis and treatment.
 In: Bond MR, Charlton JE (eds) Proceedings of the VI world congress on pain. Elsevier, Amsterdam, pp 453–458

(Received for publication on April 10, 1996; accepted on November 29, 1996)

J Anesth (1997) 11:171; ©JSA 1997

Safe method of tracheal extubation after tracheal reconstruction

Kazunori Koga

Department of Anesthesiology, University of Occupational and Environmental Health, School of Medicine, Kitakyushu 807, Japan (*Address correspondence to:* Department of Anaesthetics, University Hospital of Wales, Heath Park, Cardiff, CF4 4XW, UK)

To the editor: A gum elastic bougie is commonly used in the United Kingdom, as an aid for difficult intubation [1], but in Japan the efficacy of the bougie has not been widely recognized. I report a patient with tracheal stenosis in whom a gum elastic bougie was used safely to aid tracheal extubation after operation.

A 53-year-old man was scheduled for resection of an acquired subglottic tracheal stenosis that occurred after tracheostomy 5 years previously. General anesthesia was induced with halothane under spontaneous respiration. Once the patency of the airway was confirmed, 50 mg succinylcholine was given. Rigid laryngoscopy indicated that it was

possible to insert a tracheal tube of 6–7 mm inside diameter. To facilitate intubation of a 7.0 mm reinforced tracheal tube, a 15F gum elastic bougie (Eschmann, Hythe, UK) was inserted into the trachea. The tube was then passed over the bougie into the trachea without resistance.

The stenotic region was resected and the trachea reconstructed. At the end of the operation, the chin was fixed to the chest by sutures to prevent neck extension, which could cause disruption of the anastomosis. After the operation the lungs were ventilated while propofol and atracurium were given. The next morning attempts were made to wear the patient from the ventilator. After recovery from sedation, 4ml of 2% lidocaine was injected into the trachea through the tracheal tube. Because difficulty with reintubation was suspected, a gum elastic bougie was passed through the tracheal tube into the trachea before tracheal extubation. The trachea was then extubated over the bougie. There was no sign of airway obstruction. The presence of the bougie did not cause coughing. The patient even could speak, which suggested that the function of the vocal cords had recovered. The bougie was therefore removed. The patient recovered uneventfully.

In patients who undergo tracheal reconstruction, reintubation might be required owing to collapse of the airway [2] or dysfunction of the vocal cords [3]. In addition, it would be difficult to reintubate the trachea because of the full flexion of the neck. Insertion of a bougie before tracheal extubation facilitates possible reintubation of the trachea.

References

- Dogra S, Falconer R, Latto IP (1990) Successful difficult intubation. Tracheal tube placement over a gum-elastic bougie. Anaesthesia 45:774–776
- Wilson RS (1991) Tracheostomy and tracheal reconstruction.
 In: Kaplan JA (ed) Thoracic anesthesia. 2nd edn. Churchill Livingstone, New York, pp 441–461
- Grillo HC, Donahue DM, Mathisen DJ, Wain JC, Wright CD (1995) Postintubation tracheal stenosis. Treatment and results. J Thorac Cardiovasc Surg 109:486–493

(Received for publication on August 28, 1996; accepted on December 20, 1996)