Surgical Management of Nontoxic Multinodular Goiter: Is the Jury Still Out?

Debajyoti Mohanty¹ · Ashwani Kumar Dalal¹

Received: 4 June 2014 / Accepted: 19 June 2015 / Published online: 30 June 2015
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We have read with interest the article comparing harmonic scalpel (HS) and conventional hemostasis (CH) in thyroidectomies by Yener et al. [1]. Meticulous hemostasis during thyroidectomies is of paramount importance. Imperfect hemostasis culminates in a tension hematoma which in turn contributes to the development of laryngeal edema and respiratory obstruction, the most fearsome complication following thyroid surgery.

The study population in this article comprised of patients having multinodular goiter (MNG) with or without toxic features. They were subjected to either lobectomy ($n=37$, 43.5 %) or total thyroidectomy ($n=48$, 56.5 %) for the management of their underlying pathologies. The basis on which these patients were selected for each procedure was not outlined by the authors. The superiority of total thyroidectomy in the management of toxic MNG is unequivocal; however, the appropriate management strategy for benign, nontoxic MNG is still far from certain. A variety of procedures starting from nonoperative management with close follow-up to total thyroidectomy have been advocated. The indications for surgical intervention are cosmetic, pressure symptoms, MNG unresponsive to thyroxine supplementation, and suspicious or indeterminate cytology on fine needle aspiration. At present, the balance is tilted in favor of total thyroidectomy in such patients. Total thyroidectomy obviates the risk of suboptimal management of incidental thyroid malignancy and goiter recurrence. So, the need for the technically demanding revision surgery is averted. Lobectomy as a procedure of choice is

exercised in a select group of elderly patients having benign pathology, nodularity confined to a single lobe, and in centers equipped with frozen section facility. The final verdict is eagerly awaited from an ongoing Cochrane review evaluating the role of total versus subtotal thyroidectomy for management of benign MNG [2]. In such a scenario, it will be interesting to know whether the allocation of such high number of patients to the lobectomy group was carried out randomly or upon satisfying certain predefined criteria.

The authors have concluded that HS is beneficial in thyroidectomies in terms of shorter operative time, reduced drain output, less postoperative pain, and fewer incidence of postoperative transient hypocalcemia. We find certain contradictions in this article that merit clarification by the authors. The authors were unable to find any significant difference in the amount of blood loss when comparing the two groups, but the measured drain output was significantly less in the HS group. This should mean that the volume of thyroid and the extent of dissection in the CH group was more than the HS group; however, the authors had noted that there was no significant difference in the mean thyroid weight between the two groups. On the contrary, they have also mentioned of larger size thyroids being removed in the HS group.

Lastly, the finding of reduced postoperative pain in the HS group was not supported by any data in the “Results” and the dose of the analgesic prescribed (Diclofenac 1000 mg 8 hourly) to the patients in this study far exceeds the safe permissible dose of 150 mg per day [3].

✉ Debajyoti Mohanty
debajyoti.mohanty@gmail.com

¹ Department of General Surgery, All India Institute of Medical Sciences, Raipur, Chhattisgarh 492099, India

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