LETTER TO THE EDITOR



Queries and Comments on the Current Role of "Selective Parathyroid Venous Sampling in Patients with Persistent or Recurrent Primary Hyperparathyroidism and Negative, Equivocal or Discordant Noninvasive Imaging"

Goonj Johri¹ · Gyan Chand¹

Published online: 18 January 2017 © Société Internationale de Chirurgie 2017

Dear Editor,

We read with interest the article "Selective Parathyroid Hormone Venous Sampling in Patients with Persistent or Recurrent Primary Hyperparathyroidism and Negative, Equivocal or Discordant Noninvasive Imaging" by Sun et al. [1]. We would like to congratulate the authors on such an exhaustive research and thorough analysis.

However, we would like to have some clarification on the following points.

- 1. Since the study population comprises of reoperative cases, vascular remodelling due to previous surgery alters the native anatomy; however, similar studies by Hader et al. [2] and Ginsburg et al. [3] have followed predetermined sampling positions for sPVS. We would like to know the protocol followed for sPVS at the clinic?
- 2. It is believed that the parathyroid surgeon's experience is a very important factor in minimizing recurrent or persistent hyperparathyroidism. In a study conducted at Mayo Clinic, it was reported that 82% of patients requiring reoperation were initially treated at an outside centre and had single gland disease versus 15% of those initially treated at the clinic [4]. Keeping this in mind, we needed some clarifications regarding two patients, one case in which three glands were removed during reoperation and another patient in which there was a negative gradient on sPVS and negative bilateral cervical exploration. What was the operative finding of the primary surgery and histopathology report in these cases and also were there any intraoperative adjuncts used during

- reexploration at your centre for these cases or was size of the gland taken as the criteria of resection.
- 3. Two cases were excluded due to metastatic parathyroid carcinomatosis. Does this imply secondaries to the parathyroid or parathyromatosis due to implantation of spilled benign parathyroid tissue?

Lastly we feel that although a negative gradient at sPVS may warrant against a blind surgical exploration, patients with symptomatic disease deserve reexploration and a chance at cure. In the current scenario, with the advent of newer techniques like double-tracer ¹²³I/^{99m}Tc-sestamibi, 4D CT and ¹¹C-methionine PET/CT, sPVS no longer remains a frequently recommended investigation [5]; however, it can still prove helpful when all the less invasive localization modalities have failed.

References

- Sun PY, Thompson SM, Andrews JC et al (2016) Selective parathyroid hormone venous sampling in patients with persistent or recurrent primary hyperparathyroidism and negative, equivocal or discordant noninvasive imaging. World J Surg 40(12):2956– 2963. doi:10.1007/s00268-016-3621-z
- Hader C, Uder M, Loose RWR et al (2016) Selective venous blood sampling for hyperparathyroidism with unclear localization of the parathyroid gland. Interv Radiol. doi:10.1055/s-0042-113613
- Ginsburg M, Christoforidis GA, Zivin SP et al (2015) Adenoma localization for recurrent or persistent primary hyperparathyroidism using dynamic four-dimensional CT and venous sampling. J Vasc Interv Radiol 26:79–86
- Thompson GB, Grant CS, Perrier ND et al (1999) Reoperative parathyroid surgery in the era of sestamibi and intraoperative parathyroid hormone monitoring. Arch Surg 134:699–705
- Schalin- Jantti C, Ryhanen E, Heiskanen I et al (2013) Planar scintigraphy with 123I/99mTc-sestamibi,99mTc-sestamibi SPECT/ CT, 11C-methionine PET/CT, or selective venous sampling before reoperation of primary hyperparathyroidism? J Nucl Med 54: 739–747

Luknow, India



[☐] Goonj Johri Goonjjohri@gmail.com