LETTER TO THE EDITOR



Patterns of Use and Short-Term Outcomes of Minimally Invasive Surgery for Malignant Pheochromocytoma: A Population-Level Study

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We read with interest the article entitled 'Patterns of Use and Short-Term Outcomes of Minimally Invasive Surgery for Malignant Pheochromocytoma: A Population-Level Study' [1]. Congratulations to the authors for reporting the largest cohort of the patients having this rare disease. They have done a commendable job, considering that it was an analysis of a database and that data were collected over a long period of time. Having said this, we would like to make few comments and have some of our queries answered:

- As we know, in case of pheochromocytoma, only the presence of metastases (distant or loco-regional lymph nodes) is widely accepted as a predictor of malignancy [2]. Does the database mention how the diagnosis of malignancy was arrived at, especially preoperatively (51.3 % patients were preoperatively diagnosed to have malignant disease [1])?
- 2. In rest of the cases was malignancy diagnosed solely on the basis of histopathology or was metastasis found during the follow-up?
- 3. In how many cases were distant metastases found and what were the sites of metastases?
- 4. The range of tumor size mentioned in Table 1 is 2–300 mm [1]. How were tumors as small as 2 mm in

- size localized? Is it just an error while recording the data or a printing error?
- 5. In how many cases was the diagnosis of malignancy known before the patient underwent MIS and what were the outcomes (partial adrenalectomy/total adrenalectomy/conversion to open technique)?
- 6. 38.9 % patients in the minimally invasive surgery group (Table 2) [1] had partial adrenalectomies. Were these patients preoperatively planned to undergo palliative/debulking surgery or it was done because of technical reasons?

References

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