Cancers-1764315

Dahan A, et al. Pathological Analysis of Encased Resected Recurrent Nerves in Locally Invasive Thyroid Cancer.

The authors pathologically examined the presence/absence of microscopic invasion of the recurrent laryngeal nerves resected due to encasement in thyroid cancer. They compared the rate of invasion between various kind of thyroid cancers including common type follicular-cell derived tumors, aggressive subtypes (tall cell, columnar cell, and diffuse sclerosing), pediatriccases and medullary thyroid carcinoma. While, this retrospective study did not show how many patients could avoid nerve resection by shaving or partial layer resection. In this biased population, the conclusion that aggressive variants and medullary thyroid carcinoma invaded the nerve more often than classic papillary thyroid carcinoma does not seem to be fair. To conclude nerve preserving techniques in the presence of an encased nerve may carry a high risk of leaving significant residual disease, local recurrence rate around the nerve should be shown in cases where the nerve was preserved by R1/R2 resection.

The resected nerves were pathologically invaded in 85% of whole cohort. This fact indicates that the decision to resect or preserve the nerve is quite appropriate. The authors only descried the way of decision-making as "multifactorial". Please specify more concrete methods to choose nerve resection than the generalities in Table 2. How do the authors utilize intraoperative nerve monitoring?

Surprisinglyenough, patients with preoperative recurrent nerve palsy had lower rate of microscopic invasion than who without palsy. Please describe the situations further. In recurrent cases, postoperative adhesion may make it difficult to assess the presence of true invasion intraoperatively. These cases should be described in detail including the status atinitial surgery and evaluated separately.

Minor points

- 1. Study period was between 2005 and 2020 in Abstract, but from 2005 to 2021 in line 48.Please correct.
- 2. In this study, is microscopic invasion different from perineural invasion? The definition of microscopic invasion (line 234-235) should be described in Methodssection.

- 3. Did the two pathologists agree with microscopic invasion in all cases?
- 4. Statistical methods and software should be shown in Methods section.
- 5. Were all follicular-cell derived tumor papillary thyroid carcinoma?
- 6. Continuous variables should be shown mean (average)±standard deviation or median with range as appropriate(a normal distribution or not).
- 7. Regarding theanalysis of risk factors for microscopic invasion, additional table would be helpful.