



Indocyanine green fluorescent image-guided inguinal sentinel node biopsy for vulvar cancer: criteria and intraoperative challenges

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We read with great interest the article entitled “Indocyanine green fluorescent image-guided inguinal sentinel lymph node biopsy in vulvar cancer.” by Kwak et al. [1].

We would like to congratulate the authors for their excellent surgical technique. The method was applied in a patient with a 3 cm sized palpable vulval mass, and the final histology revealed a vulval adenoid cystic carcinoma with positive sentinel lymph node (International Federation of Obstetrics and Gynecology stage IIIa). Based on the findings of GROINSS-V study and GOG-173 trial [2,3], inguinofemoral lymphadenectomy could be omitted in the case of a negative sentinel lymph node biopsy. Adenoid cystic carcinoma of the vulva is rarely reported; however, it is described as slowly progressing with late and distant recurrences [4,5].

We would like to ask the authors if frozen sections are used in their center, and what protocol is followed in the case of a positive frozen section. Do they complete an inguinofemoral lymphadenectomy? We would also like to highlight that currently, a new Swedish clinical trial is trying to clarify whether such an approach can be offered in non-squamous cell vulvar cancers, tumors >4 cm in diameter, multifocal tumors, or local recurrences [6].

A recent systematic review revealed that the diagnostic value of indocyanine green fluorescent guided biopsy is equal to that of other techniques, e.g., blue dye or technetium-99m techniques [7].

Once again, we would like to thank the authors for their contribution.

Conflict of interest

No potential conflict of interest relevant to this article was reported.

Ethical approval

This study does not require approval of the Institutional Review Board because no patient data is contained in this article.

Patient consent

Written informed consent and the use of images from patients are not required for the publication.

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References

1. Kwak YH, Lee YJ, Lee JY, Nam EJ, Kim S, Kim YT, et al. Indocyanine green fluorescent image-guided inguinal sentinel lymph node biopsy in vulvar cancer. *Obstet Gynecol Sci* 2022;65:223-5.
2. Van der Zee AG, Oonk MH, De Hullu JA, Ansink AC, Vergote I, Verheijen RH, et al. Sentinel node dissection is safe in the treatment of early-stage vulvar cancer. *J Clin Oncol* 2008;26:884-9.
3. Levenback CF, Ali S, Coleman RL, Gold MA, Fowler JM, Judson PL, et al. Lymphatic mapping and sentinel lymph node biopsy in women with squamous cell carcinoma of the vulva: a gynecologic oncology group study. *J Clin Oncol* 2012;30:3786-91.
4. Johnson LR, Nair RP, Sambasivan S, Mony RP, Gangadharan J, Kumar A, et al. Adenoid cystic carcinoma of vulva-11 years' single-institution experience. *J Obstet Gynaecol India* 2017;67:196-201.
5. Ha HI, Chang HK, Park SJ, Lim J, Won YJ, Lim MC. The incidence and survival of cervical, ovarian, and endometrial cancer in Korea, 1999-2017: Korea central cancer registry. *Obstet Gynecol Sci* 2021;64:444-53.
6. Zach D, Kannisto P, Stenström Bohlin K, Moberg L, Kjöhede P. Can we extend the indication for sentinel node biopsy in vulvar cancer? A nationwide feasibility study from Sweden. *Int J Gynecol Cancer* 2020;30:402-5.
7. Koual M, Benoit L, Nguyen-Xuan HT, Bentivegna E, Azaïs H, Bats AS. Diagnostic value of indocyanine green fluorescence guided sentinel lymph node biopsy in vulvar cancer: a systematic review. *Gynecol Oncol* 2021;161:436-41.