



Letter to the Editor

Reply to Oliver W. Hakenberg and Chris Protzel's Letter to the Editor re: Niels M. Graafland, Joost A.P. Leijte, Renato A. Valdés Olmos, et al. Scanning with 18F-FDG-PET/CT for Detection of Pelvic Nodal Involvement in Inguinal Node-Positive Penile Carcinoma. *Eur Urol* 2009;56:339–45

We thank Drs. Hakenberg and Protzel for their interest in our article [1]. Although we appreciate their comments, we disagree with several of the views they have expressed. Their main concerns relate to the methodology of our study, the fear of delayed lymphadenectomy, and the anatomic predictability.

With respect to the methodology, there is ample clinical and literature evidence that crossover from the groin to the contralateral pelvic area does not occur [2–4]. This evidence is the basis for our analysis and for the rationale of dividing whole patients into two.

There is more than enough evidence on the prognostic significance of pelvic lymph node invasion [4]. Survival of patients presenting with pelvic metastases is virtually nil. Therefore, surgery as a sole therapy is not effective [4,5]. Patients could benefit from multimodality treatment if presence of pelvic metastases is known beforehand, and in such cases, positron emission tomography (PET)/computed tomography (CT) scan could be of importance. Propagating surgery and emphasizing early surgery where evidence has shown no benefit does not seem rational.

The limitations of our results are clearly mentioned in the article, and the reader is cautioned that the 95% confidence interval of the sensitivity (91%) is 58–100%, as stated in our report. Sensitivity of PET/CT imaging is dependent on the intranodal tumour burden, with more false negatives for the depiction of smaller metastases, as previously reported by Kitajima et al. [6] and fully referenced in our article.

In the opinion of Hakenberg and Protzel, the notion of exact anatomic predictability of metastatic spread is an assumption that has not been proven. There is no doubt about the first lymphatic drainage region: the inguinal region [3,7]. In the vast majority of cases, the tumour cells disseminate in a stepwise fashion to the ipsilateral pelvic lymphatic region. This notion is supported by large patient series and especially by sentinel node studies, which improved our knowledge on lymphatic drainage.

Thereafter, the predictability of spread is low. In some patients, the pattern is different [3,5]. Figure 3 is an illustration of metastatic spread from the inguinal lymphatic bypassing the pelvic region. We would like to emphasize that this figure is not an example of crossover of lymphatic dissemination. This case highlights the value of PET/CT imaging in staging penile cancer patients who are at risk for metastatic spread in regions other than the groin [5].

Hakenberg and Protzel point out that several patients had evidence of false-negative PET/CT findings and that follow-up is not given. With some patients we were faced with the limitations of a clinical study. No reference was available in eight pelvic basins; therefore, they could not be evaluated. This does not mean that the results were false negative. Median follow-up of included patients was 7 mo, as reported in the article. A reason for limited follow-up is that the majority of patients died shortly after the detection of pelvic involvement or recurrence. Indeed, this may have led to overestimation of sensitivity, which is fully acknowledged in the discussion of our article.

We completely agree on the indication for ipsilateral pelvic lymphadenectomy. Moreover, we also advise pelvic lymphadenectomy if histopathologic analysis of the inguinal dissected specimen shows extranodal extension [4]. The only patients who benefit from pelvic lymphadenectomy are those with occult pelvic metastases (ie, not detected preoperatively by any imaging procedures). The reader is cautioned that omitting a pelvic lymphadenectomy when PET/CT scanning is negative is not suggested in our article. The value of PET/CT scanning in particular is to stratify patients in need for more treatment than surgery alone and to diminish unnecessary direct surgery in patients for whom it is futile.

Conflicts of interest: The authors have nothing to disclose.

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