

Current opinion on criteria for lymphadenectomy in localised prostatecancer

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INTRODUCTION: According to the EAU guidelines radical prostatectomy is only indicated in patients with localised prostate cancer, without lymph node metastases. Nomograms help us to predict the chance of lymph node involvement (LN+). The gold standard for accurate lymph node (LN) staging remains an operative lymphadenectomy.

Recent literature support the importance of extended pelvic lymph node dissection (PLND) for both diagnostic and therapeutic goals. Nevertheless the EAU guidelines and the Partin tables are still based on the results of standard PLND. Do these tables underestimate actual LN+?

MATERIALS AND METHODS: We analysed 165 patients who underwent a laparoscopic / endoscopic PLND, from january 2006 till october 2008. The range of the extended PLND include all nodes from the fossa obturatoria, on the internal and the external iliac vessels. We analysed the following parameters: age, PSA, clinical staging, Gleason score and postoperative pathology.

RESULTS: Mean age was 65 years; mean PSA was 18,7 ng/mL; mean number of dissected LN was 13,8 per patient. 34 patients met all 4 criteria as stated by the EAU guidelines. None of these patients had LN+. Partin tables could be applied to 144 patients. 105 of these patients had a preoperative chance of LN+ < / = 10%; 5% had LN+. 39 patients had a preoperative chance of LN+ > 10%; 11% had LN+.

CONCLUSION: We found positive lymph nodes in patients staged as cT2 prostate cancer, who were according to the Partin tables, at low probability of lymph node invasion (<10%). This series is limited and no conclusions can be made out of it. Based on recent literature we suspect that it is useful to perform an extended PLND in all patients when either of 4 criteria of the EAU guidelines indicate a PLND. We suspect an understaging of the LN+ by the present common nomograms.

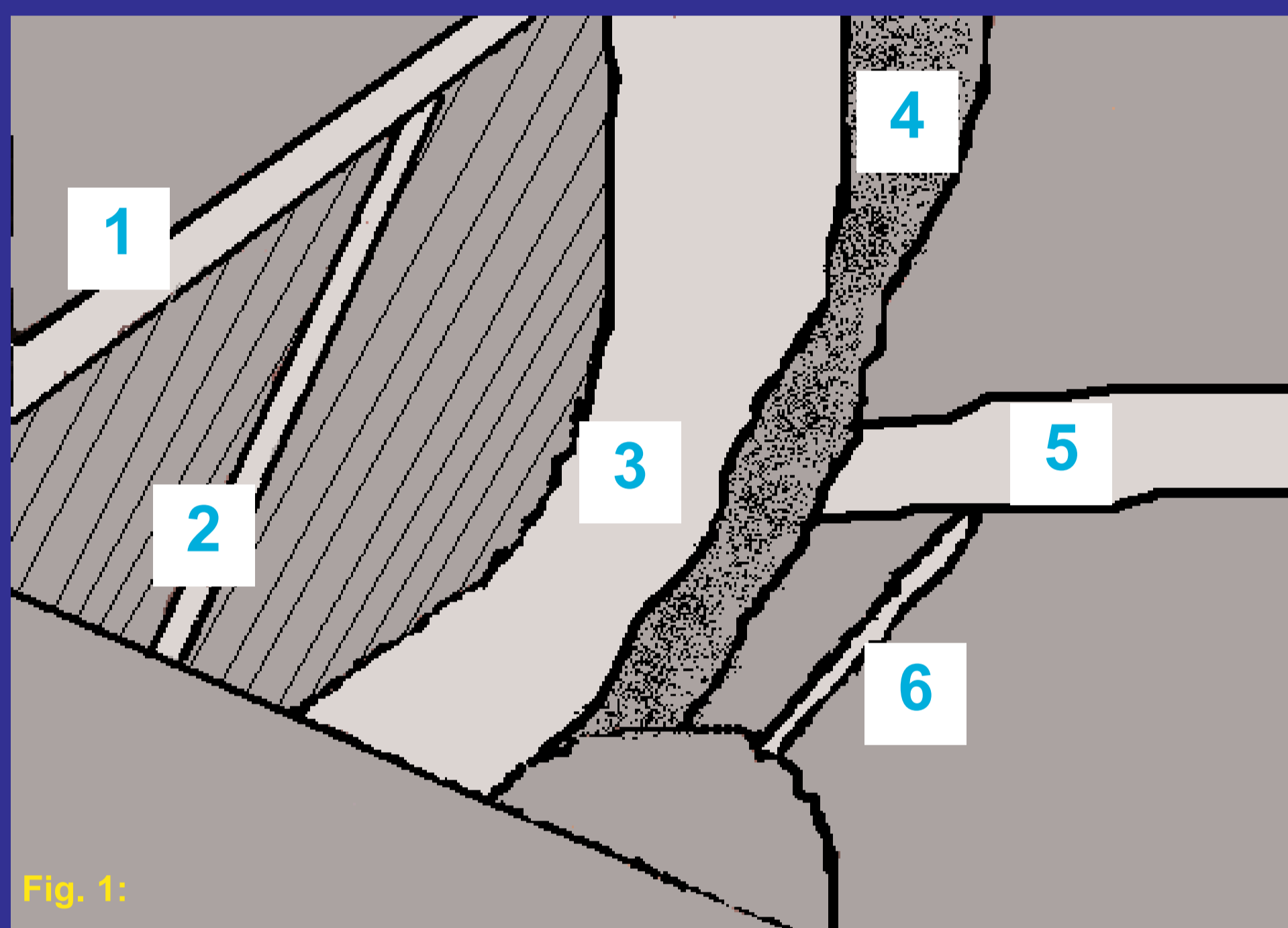


Fig. 1:

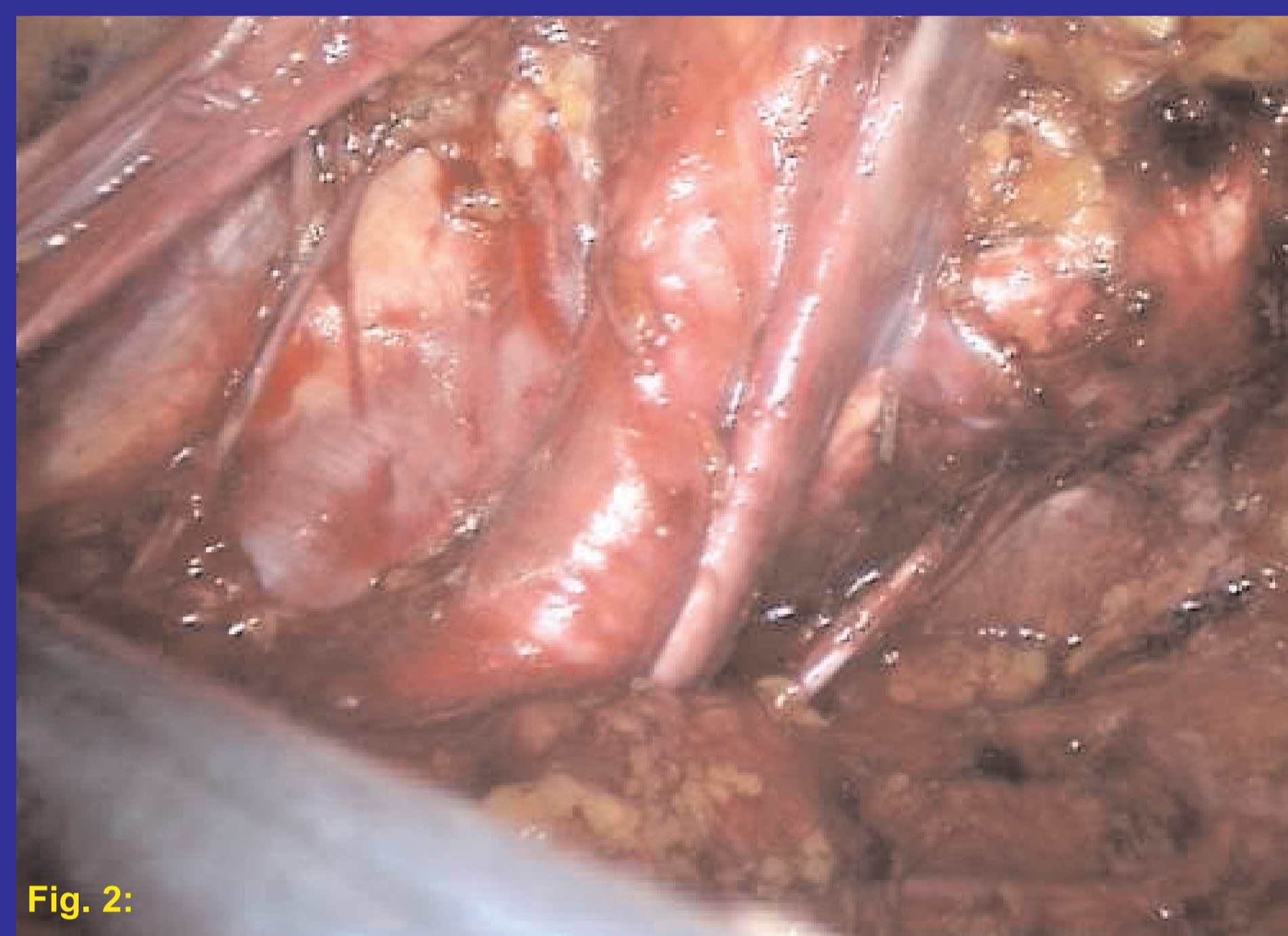


Fig. 2:

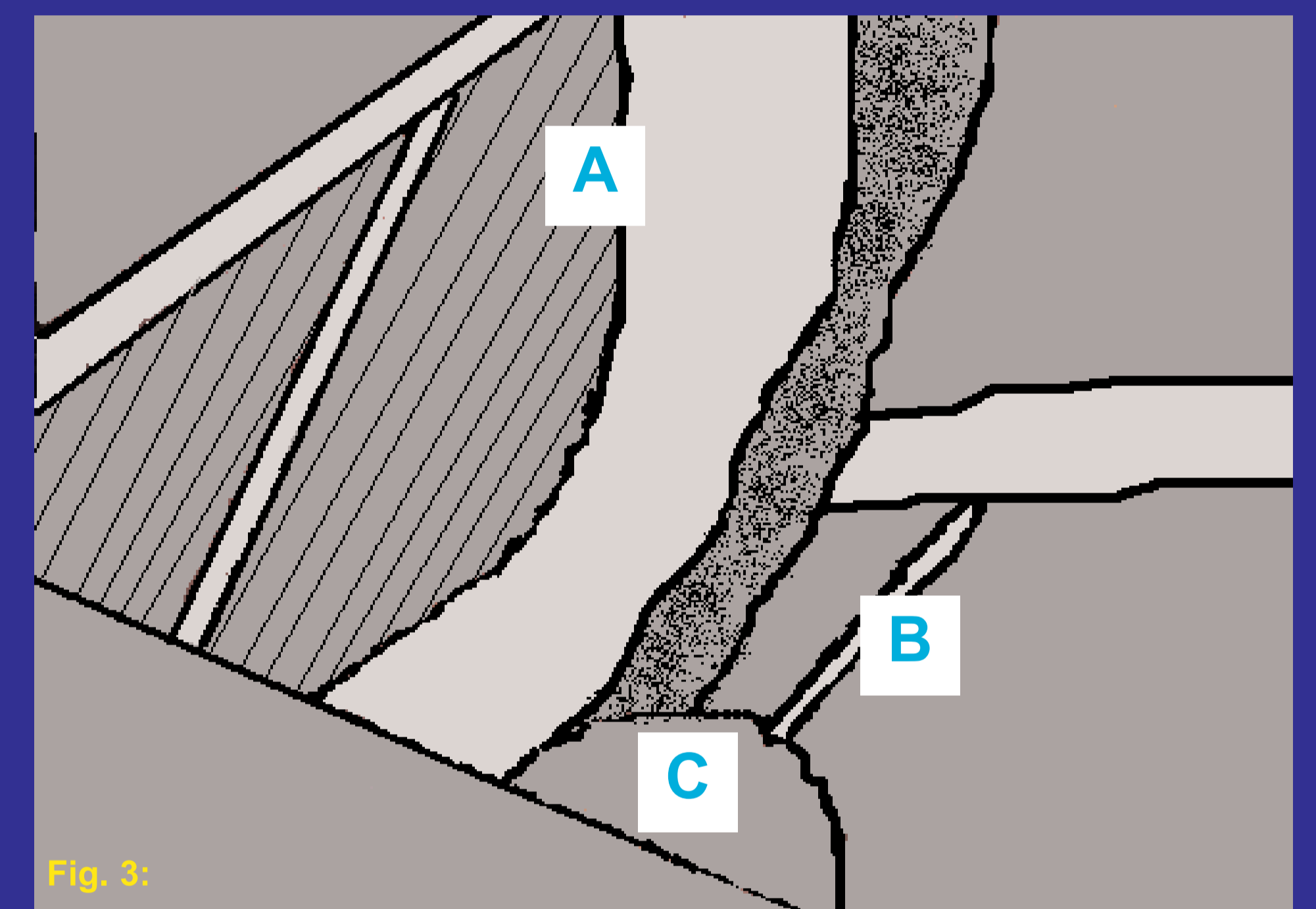


Fig. 3:

Fig. 1: Anatomical description of fossa obturatoria en iliac vessels. 1. Funiculus spermaticus, 2. Nervus genitofemoralis, 3. Arteria iliaca externa, 4. Vena iliaca externa, 5. Arcus pubis, 6. Nervus obturatorius.

Fig. 2: Endoscopic view after extended pelvic lymphadenectomy on the left side.

Fig. 3: Boundries of extension in pelvic lymphadenetomy: A/ external iliac vessels, B/ fossa obturatoria, C/ internal iliac vessels.



Patients with stage T2A or less, PSA < 20 ng / mL and a Gleason score < / = 6 have less than a 10% likelihood of having node metastases and may be spared node evaluation. Accurate lymph node staging can only be determined by operative lymphadenectomy.

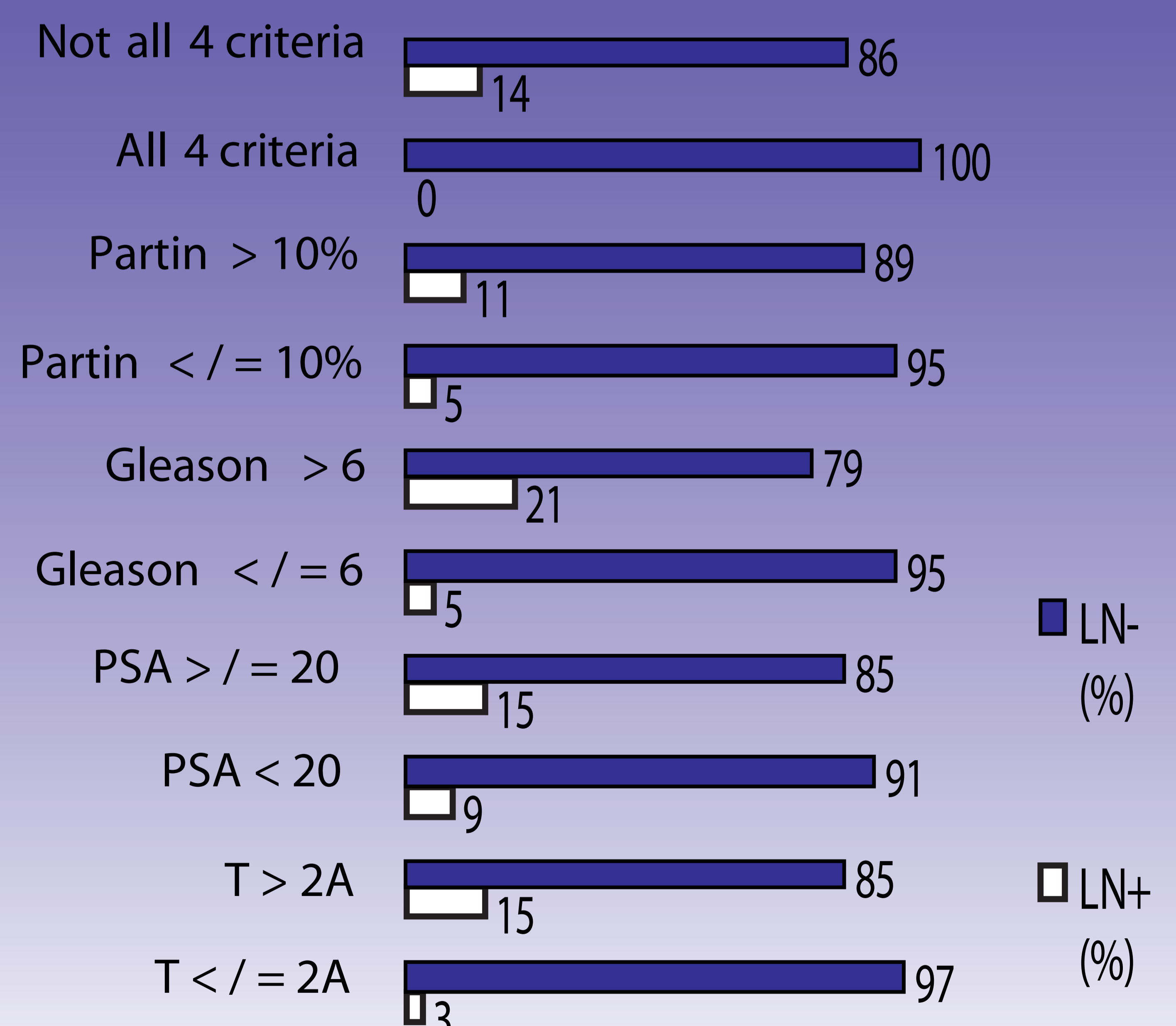
	Sensitivity	Specificity
CT	0,42*	0,82*
MRI	0,39*	0,82*

*Clin Radiol. 2008; 63(4):387-95.

Table 1: Alternatives for lymphenectomy



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Graphic 1: Percentage LN- and LN+ per criterion