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Title (type in CAPITAL LETTERS, leave one blank line before the text)
NERVE ASSESSMENT DURING LAPAROSCOPIC GYNAECOLOGIC PROCEDURES- A METHOD TO CLEAR URETHRAL AND BLADDER FUNCTION?
<u>Aims of the Study:</u> The possibility to assess nerve function during laparoscopic procedures was assessed.
<u>Methods:</u> Laparoscopic para-aortic and pelvic lymphadenectomy in women with cervical cancer and laparoscopic surgery for endometriosis was carried out. Nerve stimulation was performed after visualization of the hypogastric, splanchnic and pudendal nerves. Urodynamic data were obtained simultaneously such as intravesical, intraabdominal (rectal) and urethral pressure and pelvic floor/sphincter E.M.G..
<u>Results</u> The surgical procedure used allows access to the superior and inferior hypogastric, splanchnic and pudendal nerves as well as to the nerve roots of the segments S2 to S5. Urodynamic monitoring during the procedure is possible. Pneumoperitoneum and instrument change do not cause problems to obtain abdominal, urethral and intravesical pressure readings. Nerve stimulation should be applied with a bipolar or tripolar probe in order to apply a well-defined current to distinct neural structures Nerve stimulation is influenced by technical problems such as finding optimal electrical parameters and by the destruction of the nerves due to the disease and dissection during the procedure
<u>Conclusions.</u> The technique presented offers a combination of laparoscopic intrapelvic nerve identification with neurostimulation and thus, functional studies. It may be helpful for the pelvic surgeon to develop new bladder and bowel function sparing procedures by getting new insights into the function of the lower urinary tract. Furthermore, this approach could be used to develop other means of neuromodulation, pain management and neurostimulation. More studies will be necessary to optimize stimulation parameters and to obtain a thorough functional knowledge of the nerves supplying bladder, urethra and rectum

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