Identification of Sacral plexus at Robot assisted nerve sparing radical hysterectomy with extended lymphadenectomy

Yoon Soon Lee
경북대학교 의과대학 산부인과학교실

목적: Demonstrate a new instrument, technique or procedure

방법: We use da Vinci system to demonstrate surgical technique of identification of Sacral plexus in part of Robot assisted nerve sparing radical hysterectomy for early cervical cancer. It necessary to understand anatomy of deep sacral plexus to prevent the nerve injury in case of extensive lymphadenectomy in high risk cervical cancer. The sacral plexus is formed by the union of the lumbosacral trunk (from the anterior rami of L4 and L5) and the anterior rami of the first, second, third, and fourth sacral nerves. The nerves forming the sacral plexus converge to the lower part of the greater sciatic foramen and unite to form a flattened band, sciatic nerve. The clinical significant of sacral plexus is that an injury to the sacral plexus, leaves the patient with a deficit in the sensation and/or movement and experience neuropathic pain in the lower limb supplied by the corresponding nerve(s) affected. After extended lymphadenectomy, we could confirm the pelvic anatomy more clearly including superior hypogastric plexus, promontory, lower part of aorta, common iliac vessels, hypogastric nerve communicating with parasympathetic nerves, and vesical branches of inferior hypogastric plexus. And sacral plexus, lumbosacral trunk, S1, S2 and S3.

결과: No intraoperative complications or post-operative nerve injury that required treatment occurred.

결론: It would be expected in sacral plexus identifying extended lymphadenectomy that the more number of lymph nodes, metastatic nodes and therapeutic benefits for improvement of survival. However, it needs to evaluate long term survival benefit and functional benefits about identifying sacral plexus extended lymphadenectomy.

Robot assisted autonomic nerve sparing extended lymphadenectomy in the part of nerve sparing radical hysterectomy

Yoon Soon Lee
경북대학교 의과대학 산부인과학교실

목적: Demonstrate a new instrument, technique or procedure

방법: Between March 2011 and December 2011, 24 consecutive patients underwent robot assisted autonomic nerve sparing extended lymphadenectomy in the part of nerve sparing radical hysterectomy for the treatment of early cervical cancer (FIGO stages IA2-IIA2). The areas of extended lymphadenectomy consisted of lower paraaortic, common iliac, presacral, and hypogastric veins.

결과: After extended lymphadenectomy, we could confirm the pelvic anatomy more clearly including superior hypogastric plexus, promontory, lower part of aorta, common iliac vessels, hypogastric nerve communicating with parasympathetic nerves, and vesical branches of inferior hypogastric plexus. The mean total operating time was 300.0±62.4 minutes, and the mean console time was 274.4±53.5 minutes. The mean blood loss was 64.0±31.8 mL. The mean acquired pelvic lymph node was 24.8±10.2, and the mean extended lymph node was 16.9±9.1. The length of hospital stay averaged 10.3±6.7 days, and the mean days to normal residual urine (<100 mL) were 9.5±5.1. No intraoperative complications that required treatment occurred. In conclusion, it would be expected in extended lymphadenectomy that the more number of lymph nodes and therapeutic benefits for improvement of survival.

결론: In conclusion, it would be expected in extended lymphadenectomy that the more number of lymph nodes and therapeutic benefits for improvement of survival. However, it needs to evaluate long term survival benefit about extended lymphadenectomy, and functional benefits of preserving of superior hypogastric plexus.