



Laparoscopic Ovarian Transposition to Preserve Ovarian Function and Anatomy before Pelvic Radiation and Chemotherapy in a Young Patient with Rectal Cancer

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ABSTRACT: Ovarian transposition is a surgical technique to move ovaries from the pelvis prior to pelvic radiation in of cancers when indicated for treatment like Hodgkin lymphoma, pelvic malignancies. Preservation of ovarian is important in young girls, as early menopause due to radiation is associated with increased risk of osteoporosis, cardiovascular disease, hot flushing, urogenital atrophy and sexual dysfunction. A 14 yrs old girl diagnosed withrectal cancer (discohesive adenocarcinoma with signet ring cells morphology of upper rectal growth) had Laparoscopic ovarian transposition under general anaesthesia.Post operatively after 2 weeksAntimullerian hormone value was found to be 1.02ng/mL which shows good ovarian reserve.

KEYWORDS: SAD, AMH, MRI and CECT

I. INTRODUCTION

Ovarian transposition is a surgical manoeuvre used to protect ovarian function before delivery of a gonadocidal doses of radiation therapy.[1]Ovarian trasposition has been performed in patients whose treatment includes pelvic radiotherapy as a part of management of tumors like Hodgkin lymphoma, pelvic malignancies etc.[2]The success rate of ovariantransposition

varies widely depending upon root technique of surgery and treatment.

II. CASE REPORT

A 14 yrs old girl presented with the complain of bleeding Per rectum, constipation, pain in lower abdomen for 3 months to surgery department.

All routine investigations, ultrasonography whole abdomen were done, colonoscopy performed a circumferential growth seen and biopsy taken and came out to be rectal cancer (discohesive adenocarcinoma with signet ring cells morphology of upper rectal growth).

MRI and CECT of whole abdomen done for staging and found to be malignant rectal wall thickening with mesorectal fat invasion and loco regional lymphadenopathy (irregular rectal wall thickeiningupto 1.8cm proximal two-third of rectum and approximately 8 cm in length, bilateral few variable sized enlarged mesorectal nodes, largest 1.2cm in SAD are seen.A multidisciplinary team reviewed the case andthe patient was planned for neoadjuvant chemo radiotherapy and before that patient was planned to undergo ovarian transposition to preserve ovarian function.

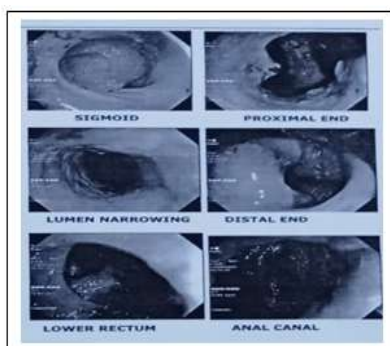


Fig1. Showing endoscopic finding with circumferential growth in rectum

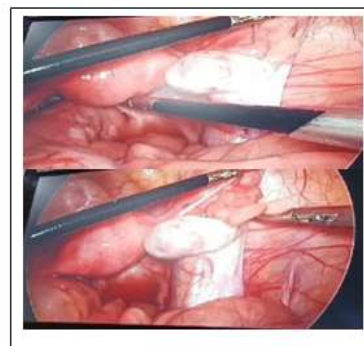


Fig1. Showing Laproscopic transposition of ovary form ovarian fossa toin right and left paracolic gutters respectively



III. MANAGEMENT

Laparoscopic ovarian transposition was performed under general anaesthesia. Uterus, bilateral ovaries, bilateral fallopian tubes were normal. bilateral ovaries were transfixed in right and left paracolic gutters respectively. Patient was referred to radiation oncology department for neoadjuvant chemoradiotherapy after 3 weeks. Post operatively patient was doing well, vitals were stable. Serum Antimullerian hormone value was found to be 1.02ng/mL after 2 weeks post operative which shows good ovarian reserve. Patient will be followed up regularly at Gynaecology department.

IV. CONCLUSION

Laparoscopic techniques can be used to move the ovaries outside the radiation portal. Consideration should be given for other abdominal and pelvic malignancies before onset of radiation treatments in patients who desire preservation of ovarian function.

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