PICTORIAL ESSAY





Laparoscopic Uterovaginal Anastomosis for Cervical Agenesis

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Received: 18 April 2019 / Accepted: 24 September 2019 / Published online: 11 October 2019 © Federation of Obstetric & Gynecological Societies of India 2019

A 22-year-old married female presented with primary amenorrhea associated with cyclical pain in abdomen and history of vaginoplasty done few years back. Speculum examination revealed absent cervix. MRI and laparoscopic findings are shown in Figs. 1 and 2. On laparoscopy, hematometra and right-sided hematosalpinx were drained (Fig. 3). Uterovaginal anastomosis was completed in steps as shown in Figs. 4a, b, 5 and 6a, b. Hysteroscopy after 1 month showed normal patent uterine cavity and bilateral ostia (Fig. 7). Patient had regular menses postoperatively and is asymptomatic till date (18 months). Patient conceived 1 year after surgery but underwent medical termination of pregnancy. Very few cases of successful laparoscopic uterovaginal anastomosis have been reported; hence, we recommend that with good surgical skills laparoscopic approach to uterovaginal anastomosis gives good results.

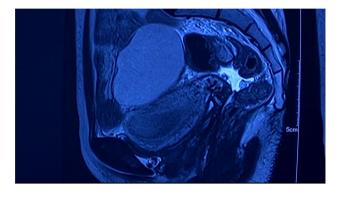
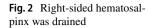


Fig. 1 MRI suggestive of hematosalpinx and hematometra and absent cervix

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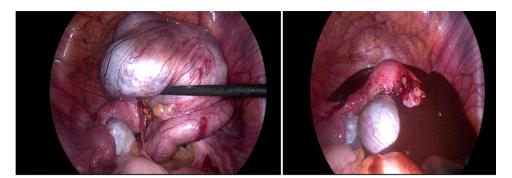


Fig. 3 Uterus suspended with suture and hematometra was drained by taking incision on fundus

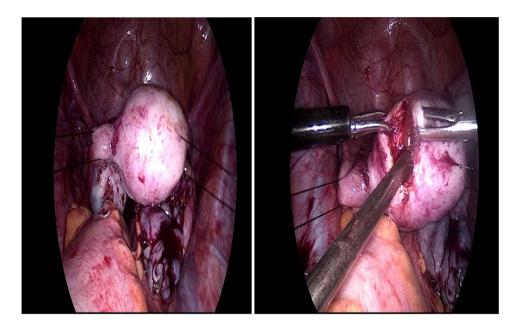


Fig. 4 a Lower end of uterus held with stay suture and incised medial to uterine arteries avoiding vascular injury. **b** Blind vaginal pouch opened over probe

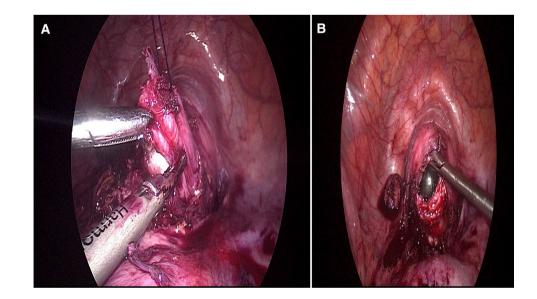


Fig. 5 Silicon catheter introduced from vagina into uterus up to fundus and retained in situ as stent

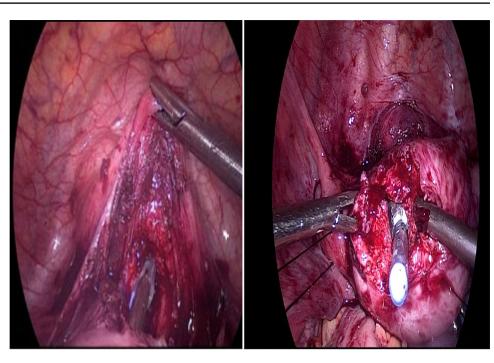
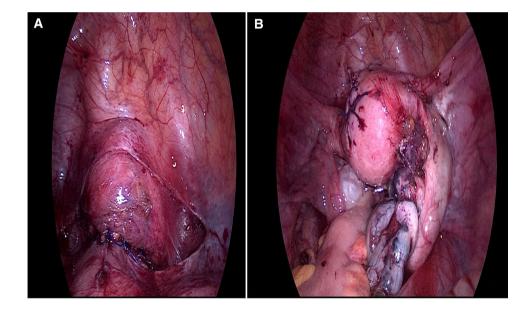


Fig. 6 a Uterovaginal anastomosis completed by suturing lower end of uterus with vagina (posterior wall followed by anterior wall). **b** Sutures taken at fundus to approximate incision taken at fundus



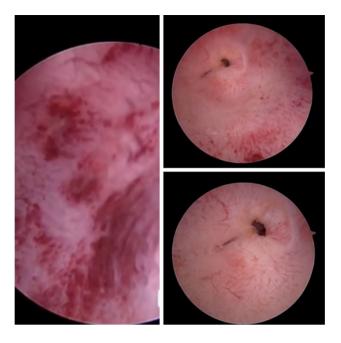


Fig. 7 Second look hysteroscopy was done after 1 month post-procedure which showed normal patent uterine cavity and bilateral ostia. Patient had regular menses for 18 months (till date) post-procedure and has no menstrual complaints

Author Contributions Dr. Nitin Shah has operated this case, searched the literature and done final proofreading of this article. Dr. Ameya Padmawar has operated this case and helped in editing the article. Dr. Pradnya Changede who has done fellowship in laparoscopy under Dr. Nitin Shah has assisted this case, written this article, done the literature search and helped in proofreading this article.

Compliance with Ethical Standards

Conflict of interest We declare that we have no conflict of interest or financial interests for the article.

Informed Consent We, authors, hereby declare that we have taken the informed consent from the patient.

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