



A success story of Robert's uterus - diagnostic dilemma and therapeutic challenges



Neeta Singh^{*#}, Deepali Garg, G. Gayatri Swetha

Department of Obstetrics and Gynaecology, All India Institute of Medical Sciences, New Delhi (**Presenting Author; #Corresponding*)

History

- 17 years old, unmarried female presented with:-
- Chief complaints:** Progressively increasing dysmenorrhea from menarche.
- Attained menarche at 13 years, has regular cycles.
- Lower abdominal pain starts 1 day prior to menses, lasts for 8–10 days.
- Severe dysmenorrhea requiring injectable analgesics, causing absenteeism from school.
- Admitted in local hospital for non relief of pain where CT scan was done s/o Bicornuate uterus, referred to higher center for further management.

Investigations

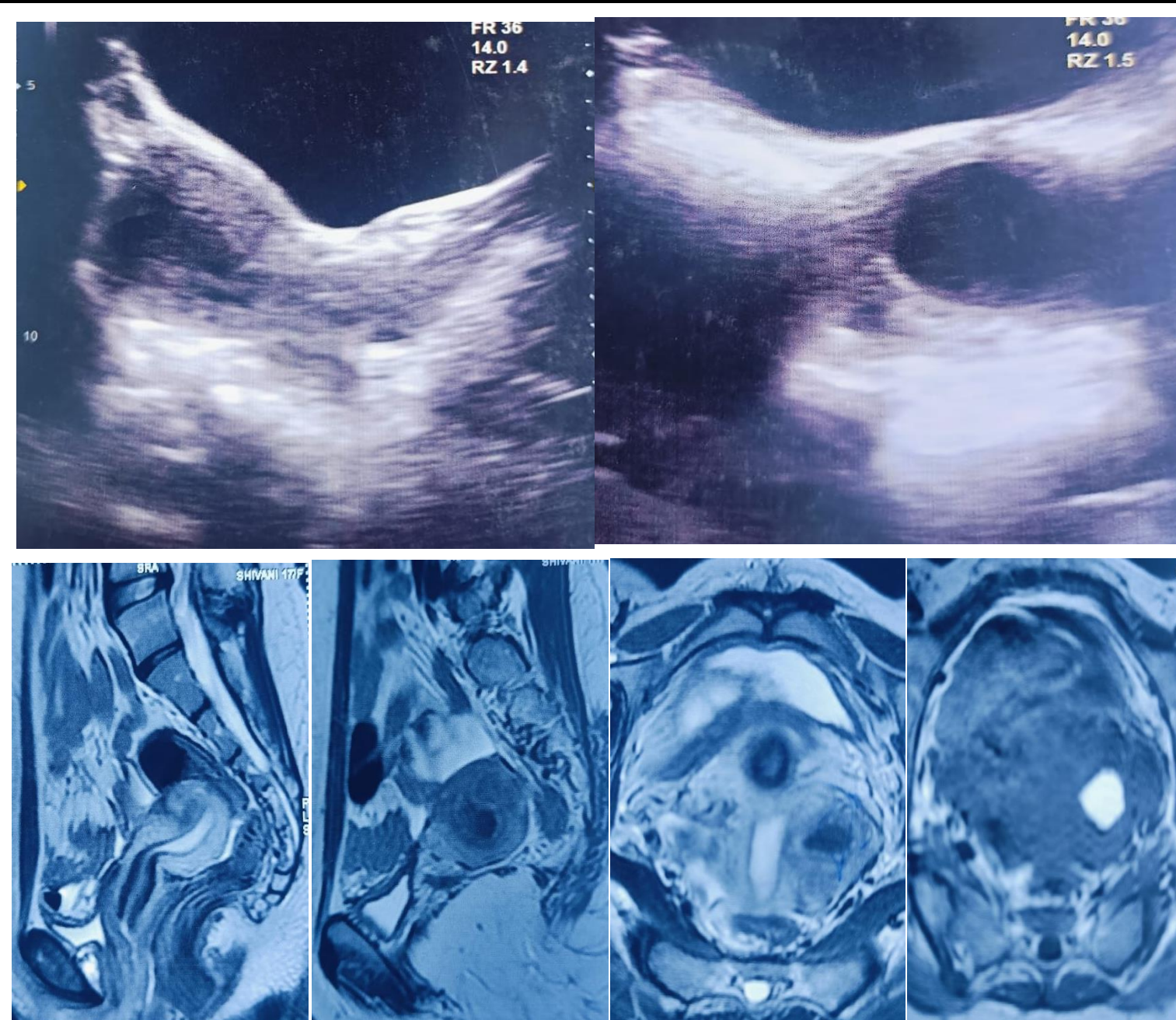
USG whole abdomen + pelvis was done:

Thick-walled cystic collection 3.2 x 3 cm in left adnexa inseparable from uterus-Rt ovary- normal, Lt ovary-not visualized

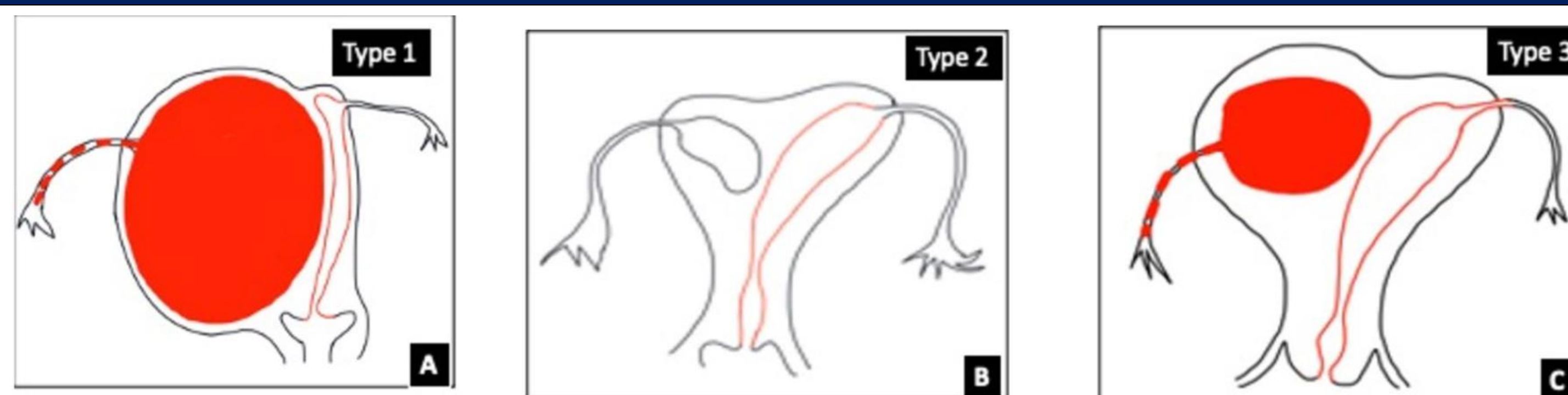
Impression: ?Bicornuate uterus with hematometra in left uterine cornua or left sided hematosalpinx.

MRI Pelvis: Unicornuate uterus with non-communicating obstructive rudimentary horn. B/L ovaries normal.

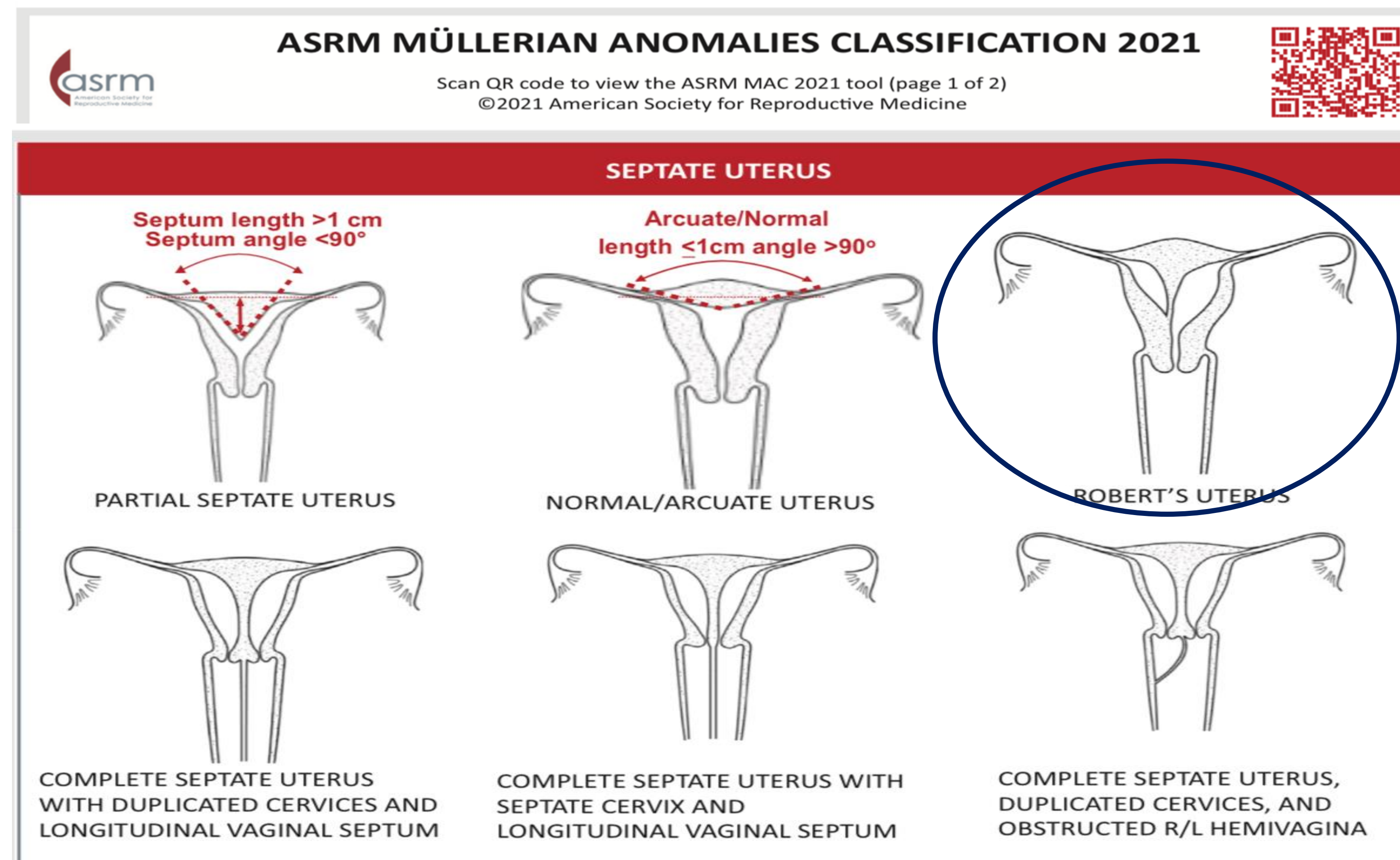
Examination: General & Systemic examination & Routine investigations WNL



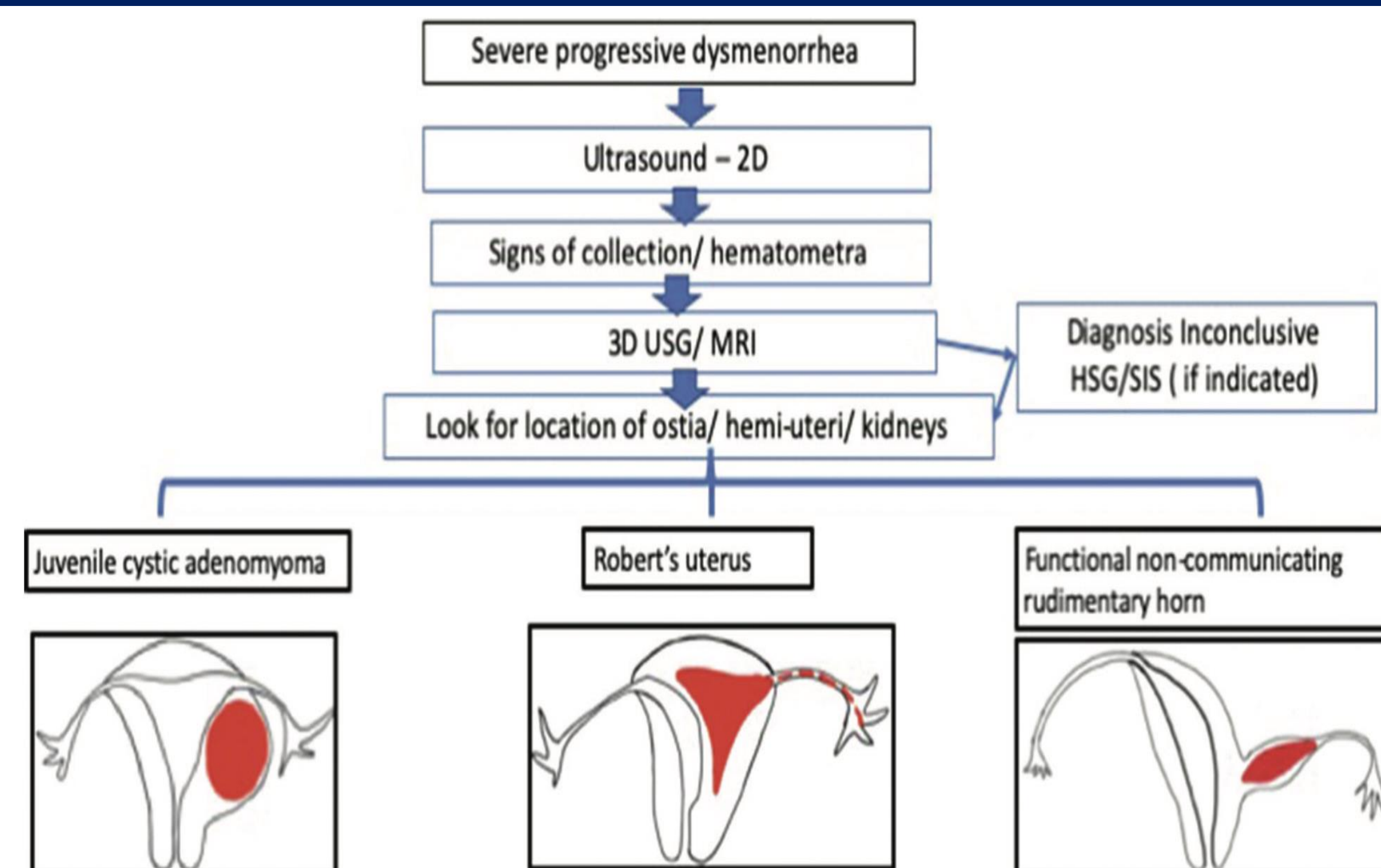
Types of Robert uterus



The latest ASRM Mullerian Anomalies Classification includes Robert's uterus



Diagnostic Algorithm



Management Plan

Plan for surgery: Diagnostic hystero-laparoscopy and proceed.

Informed consent for rudimentary horn excision/metroplasty ± hematometra drainage

Pre-operative investigations done, Pre-anaesthetic checkup - fit for surgery

Post-operative course; Anti-adhesiolysis

- Intra-uterine foley's in-situ for 5 days
- Estradiol valerate 2mg BD for 6 weeks
- Re-look hysteroscopy after 1 month

Investigations

Initial investigation for progressive dysmenorrhea in adolescent girls – Transabdominal USG - reveals hematometra.

Further confirmation - 4D USG (abdominal/transrectal) and/or magnetic resonance imaging (MRI) pelvis

MRI - most informative non-invasive diagnostic modality but sometimes difficult to differentiate due to low awareness among clinicians and radiologists.

MRI - gold standard investigation - capable of showing endometrial cavity, uterine contour, septum in detail for differentiating between septate, unicornuate uterus

Combined hysteroscopy and laparoscopy - accurately diagnose a Robert's uterus as well as differentiate it from the unicornuate uterus

Surgical options

- Hysteroscopic resection of the intervening septum/metroplasty – 1st and ideal choice
- Endometrectomy + myometrial closure
- Tompkin's metroplasty
- Hemiuterine excision – last choice

Choice of surgery : depends upon age, parity, severity of symptoms, previous obstetric history, future fertility, desires, willingness for follow-up (for repeat intervention, if needed) and surgical expertise of the surgeon.

Hysteroscopic metroplasty

Cavity expansion procedure. Resection of the septum under USG/Laparoscopy guidance Anti-adhesiolysis therapy such as hormone replacement therapy, intrauterine contraceptive device or sequential balloon therapy. Thick and muscular septa are difficult to cut and may cause a recurrence of symptoms. MRI/ 3D USG - septal thickness & location of weakest point for choosing right approach to metroplasty. Procedure of choice for all Type 1 and Type 3 Robert's uterus. Type 2 does not need any surgery.

Conclusion

All girls presenting with progressive dysmenorrhea should be evaluated for Mullerian anomalies including the rare ones like Robert's uterus. USG-guided hysteroscopic septal resection may be considered for all cases of Robert's uterus for immediate symptom relief and better future reproductive outcomes. Further long-term follow-up of these patients undergoing conservative surgeries is warranted.

ACKNOWLEDGEMENT

Department of Obstetrics and Gynaecology, All India Institute of Medical Sciences, New Delhi.