



Maribel Acién

Full Professor of Obstetrics and Gynaecology, Miguel Hernández University, Elche; Senior Consultant Gynaecologist, San Juan University Hospital, Alicante; Director, PARESAN Reproductive Pathologies Research Group, Alicante, Spain; Past coordinator & Senior Deputy (Reproductive Surgery Special Interest Group), European Society of Human Reproduction and Embryology (ESHRE)

“Successful management begins with understanding embryology”

Citation:

EMJ Repro Health. 2026;12[1]:68-69.
<https://doi.org/10.33590/emjreprohealth/1N1T76AG>

Author:

Alena Sofieva, EMJ, London, UK

Q1 Reproductive surgery has evolved considerably alongside assisted reproductive technologies. Where does surgery still have the greatest role in fertility care?

The role of reproductive surgery has certainly changed. Before IVF became widely available, surgery played a much larger role. Today, I don't see surgery and IVF as competing options. In many cases, surgery complements assisted reproduction and helps improve outcomes when used appropriately.

The key is individualisation. Every couple is different. You need to consider female factors, male factors, age, symptoms, underlying pathology, and reproductive goals before deciding on the best strategy. Sometimes surgery is primarily performed to relieve symptoms rather than improve fertility, while in other cases it optimises the chances of successful fertility treatment. The decision should always be personalised and patient/couple-shared rather than protocol-driven.

Q2 Congenital female genital tract anomalies remain one of your main areas of expertise. What has most improved diagnosis and surgical management in recent years?

Technically, minimally invasive surgery, particularly robotic surgery, has transformed what we can achieve. However, technology alone is not the most important advance.

For me, successful management begins with understanding

embryology. Without a clear understanding of how these malformations develop, imaging findings can easily be misinterpreted. A structure may be mistaken for a cyst when it actually represents part of a congenital anomaly, leading to incorrect surgery and, unfortunately, worse outcomes.

This is why I always begin educational sessions with embryology. Many clinicians have not revisited this subject since medical school, yet it remains fundamental when managing complex congenital anomalies.

Q3 What misconceptions about reproductive surgery do you encounter most often among clinicians?

One common misconception is that imaging reports alone provide enough information for surgical planning. In complex congenital anomalies, they rarely do.

I never rely solely on the radiology report. I review every scan personally alongside the radiologist because interpretation depends on understanding embryological development. We discuss every possible explanation for what we are seeing before reaching a conclusion.

Managing these patients is also inherently multidisciplinary. Depending on the anatomy involved, I work closely with radiologists, urologists, and other specialists before proposing surgery. Every patient requires an individualised plan built by the whole team.

Q4 Endometriosis management continues to evolve. How do you decide when surgery is the right approach, particularly for women hoping to preserve fertility?

The decision depends on the patient's overall clinical picture rather than fertility alone. If pain is the dominant symptom, surgery may provide significant symptom relief even if it does not dramatically increase the chance of pregnancy.

Our philosophy has always been conservative because surgery does not cure endometriosis and recurrence remains common. We try to preserve ovarian reserve whenever possible and routinely discuss fertility preservation in women at higher risk of future ovarian damage.

For women presenting primarily with infertility, surgery may still have an important role, particularly when integrated into a broader fertility treatment plan. The objective is to coordinate surgery and assisted reproduction rather than viewing

them as separate pathways.

Q5 You lead both a specialist surgical service and train future reproductive surgeons. Which skills do today's trainees need most?

Technical ability remains important, but I believe today's biggest challenge is maintaining hands-on surgical training.

For understandable medicolegal reasons, trainees have fewer opportunities to develop practical skills in the operating theatre. If we reduce those opportunities, we must compensate by investing in high-quality simulation training.

Simulation allows trainees to develop fundamental surgical movements and confidence before operating on patients. Once those basic skills are mastered, supervised operating becomes safer for both trainees and patients.

Through European Society of Human Reproduction and Embryology (ESHRE) certification programmes, we've seen how structured practical

training can significantly improve competence before surgeons enter the operating theatre.

Q6 Looking ahead, which innovations have the greatest potential to improve outcomes for women with complex reproductive conditions?

The future lies in increasingly personalised care. New technologies should help us understand the individual patient better rather than simply introducing new equipment. AI may become valuable in areas such as imaging interpretation, surgical planning, and identifying disease that might otherwise be missed.

These technologies are exciting, but they remain tools. Their true value will depend on whether they meaningfully improve clinical decision-making and patient outcomes rather than simply adding technological complexity.

