Endometriosis Classification-The Quest for the Holy Grail?

Endometriosis has baffled us for almost a century. Despite important advances, there is a constant struggle to confidently answer many fundamental questions regarding this enigmatic disease. Lack of a widely accepted classification system that accurately describes the extent and severity of the disease and takes into account various phenotypes-in particular deep infiltrative disease- is amongst factors that have hindered research in the field. Furthermore, comparison of surgical outcomes and complication rates requires a tool that accurately describes surgical complexity.

Numerous systems for classification or staging of endometriosis have been proposed to date. The most commonly used is currently the revised American Society for Reproductive Medicine (rASRM) (1). rASRM has been criticized for its arbitrary point system, its poor reproducibility and lack of correlation with symptoms (2). Also, this system is unhelpful in describing deep infiltrative endometriosis.

The Enzian system (3) attempts to address some of the above problems in more advanced diseases but has failed to gain wide acceptance, perhaps because of its complexity. Endometriosis Fertility Index (EFI) has shown promise in predicting pregnancy outcomes (4) and is the only system validated to predict a clinical outcome in endometriosis but is not designed to benchmark surgical complexity or to correlate with symptoms. Attempts to develop a better classification system are ongoing (2) but are we on the right track?

The more we understand endometriosis, the clearer it becomes that the highly complex nature of the disease defies a single all-encompassing classification system. Perhaps a system that accurately describes the surgical findings, whilst correlating with symptoms and predicting fertility outcomes cannot exist as the pathophysiology of the disease and the ways it causes its multitude of symptoms are convoluted. The success of EFI is due to its narrow scope and the fact that it doesn't aim to solve all the problems at the same time. Therefore, a similar approach is needed to devise a system that limits itself to describing the surgical findings; without attempting to correlate with symptoms or fertility outcomes.

We have been working on such a system in the last two years. VNESS (Visual Numeric Endometriosis Surgical Staging) merely describes intra-operative findings using 8 numbers. Each number corresponds to a compartment in the pelvis, starting from the left adnexa, and going down to the pouch of Douglas and back up to the right adnexa. The disease severity in each compartment can be between 0 (No disease) to 4 (Visceral invasion). A "Complexity score" on a scale of 0-10 accompanies VNESS to assist in benchmarking for surgical outcome and complication rates. VNESS does not attempt to correlate with symptoms and only attempts to turn intraoperative findings into quantitative values. Results of validation studies using videotaped procedures with multiple scorers are encouraging, showing excellent intra-observer and inter-observer correlation (5, 6).

A classification system is a language for communication and like languages, its survival depends on its simplicity, practicality, flexibility and the number of its users. We are forming an international collaborative group to refine this new language and we invite interested endometriosis surgeons to join us.

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Shaheen Khazali *
Editorial Board Member of the Journal

* Centre for Endometriosis and Minimally Invasive Gynaecology (CEMIG), Ashford and St. Peter's Hospitals NHS Foundation Trust, Chertsey, UK