Editorial

Centre of Excellence (CoE) in Management of Endometriosis – Is It Worthwhile?

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Endometriosis is a widely prevalent disease among the women of reproductive age. Approximately 190 million women suffer from endometriosis worldwide. So, 1 out of 10 women of reproductive age suffer from endometriosis.[1] Endometriosis is associated with several gynaecological and non-gynaecological comorbidities. Some women are asymptomatic, others may have episodic pelvic pain, or may experience symptoms resulting from involvement of multiple organs. It is often associated with a range of painful symptoms that include chronic pelvic pain, dysmenorrhea, dyspareunia, dysuria and dyschezia.[1,2] Women with endometriosis often suffer from fatigue and depression due to this everlasting pain. Endometriosis-related pain affects the ability to function physically and mentally, leading to social withdrawal, psychological symptoms such as depression, and broader reductions in quality of life (QoL).[3] Endometriosis is also associated with other gynecological conditions like fibroid, adenomyosis and infertility. But unfortunately these women also suffer from urinary, gastrointestinal, immunologic, neurologic, psychological, and cardiovascular symptoms.[1] Consequently, referral to other consultants is quite common. In a research conducted in the Center for Endometriosis Research and Treatment (CERT) at UC San Diego Health, USA, relative frequency of refferal from the core patient-gynecologist team to the other specialist teams were like as follows; integrative medicine 43%, mental health 23%, pain medicine 12%, physical therapy 11%, surgeon 8%, gastroenterology 2% and urology 1%.[3] So, women, healthcare providers, and scientists should be aware that endometriosis is a condition that can affect the woman entirely.

As such, multidisciplinary team (MDT) approach is necessary to provide individualized care that considers all of these issues. The multidisciplinary team management approach in endometriosis involves healthcare providers from different specialties working together to provide comprehensive and coordinated care. And the goal is to improve the quality of care for patients by providing a holistic approach that considers all of the patient's needs, including physical, emotional, and psychological well-being. The need for MDT approach and the need to refer to tertiary centres with the appropriate expertise to offer all available treatments has also been emphasised in the European Society for Human Reproduction and Embryology (ESHRE) Guideline on the Diagnosis and Management of Endometriosis.[4]

A multidisciplinary team led by an experienced gynaecological surgeon working together with reproductive endocrinology and infertility specialist, a urologist, colorectal surgeon, specialist nurse, specialist gynaecology radiologist, pain management specialist, counsellors/psychologist, nutritionist, and patient support organisations is essential in managing complex cases.[5,6] Gynaecologist, especially endometriosis specialist, plays the central role. If the endometriosis affects the bowel, surgical treatment such as full-thickness disc excision or a bowel resection should only be performed by an experienced colorectal surgeon. Having an experienced urologist as part of the multidisciplinary team can help aid in the treatment of ureter and bladder lesions as well as minimize kidney or bladder complications. Diagnostic testing of endometriosis is also challenging. The radiologist on the team should be experienced in endometriosis and familiar with the pelvic nerve anatomy and how to detect signs

of neural endometriosis. There are different stages and types of endometriosis. Endometriosis with architectural atypia is one type that may be a precursor of ovarian cancer. Therefore, it's important that a pathologist carefully examines the lesions to discover if they could be indicative of endometriosis-associated ovarian cancer (EAOC).[7] Physical therapy may help the patients adapt to pain and stay mobile. Highly specific pelvic floor physical therapy (PFPT) helps to reduce dyspareunia as it improves muscle relaxation, normalizes resting muscle activity, increases vaginal elasticity, muscle awareness, and proprioception.[8] Endometriosis pain is often the primary complaint and most debilitating symptom and sometimes may become so intense that it hampers the woman's daily life. For this reason, a pain management doctor should be a part of the team to improve functioning and overall quality of life. Anxiety and depression often accompany endometriosis. Furthermore, the pain and sometimes infertility can further aggravate these negative emotions. Therefore, endometriosis patients often need a psychiatrist or psychologist, possibly one who specializes in pain management. Last but not the least, a proper endometriosis diet can help to reduce the chronic inflammation that keeps the endometriosis lesions growing and spreading. A nutritionist with experience in treating endometriosis patients is a key for successful outcomes.[5]

But the problem with MDT approach is that consultation with all the specialties might take much longer time and cost will become high. Additionally, without a comprehensive management plan, there is a diagnostic delay of over 8 years with 65% of women with endometriosis initially misdiagnosed and almost 50% having to see five doctors or more before a correct diagnosis is made.[9] So, for the best help and convenience of the patients there should be dedicated specialized centres for endometriosis patients and these are the Centre of Excellence (CoE). A Centre of Excellence (CoE) for endometriosis is a specialized institution or facility dedicated to comprehensive and multidisciplinary care, research, and education of patients with endometriosis. The first step is therefore to assign a central gynaecologist to the woman who seeks care for her endometriosis symptoms through a Centre of Excellence (CoE), which should also have provisions for research, training and access to community support groups. Together, they will map out the appropriate clinical pathway depending on the woman's symptoms, expectations, needs/wants, age, etc.

The concept of Centre of Excellence (CoE) for endometriosis was first formally proposed in 2006 and has been successfully implemented in the USA, UK and a number of European countries, such as Denmark, Germany and France.[6] The ultimate goal of a CoE for endometriosis is to reduce the delay in diagnosis, achieve improved patient outcomes, minimize hospitalizations, lower healthcare costs, and attain high patient satisfaction. It also reduces chances of expensive hit-and-miss treatments, avoids expensive fertility treatments if the disease is under control before fertility is impaired and saves days lost to education and/or work because of the disease. However, establishing a CoE in Multidiciplinary team management of endometriosis requires significant investment and resources in terms of infrastructure, staffing, and equipment. Therefore, it is important to ensure that the CoE has a sustainable business model, long-term funding, and a strong network of healthcare providers who can refer and treat patients at the facility. It can only be a worthwhile endeavor if it is done effectively.

For women with endometriosis, an MDT approach is necessary because it requires the expertise of multiple healthcare providers with different specialties. Only COEs, i.e. dedicated institutions or facilities designed to provide comprehensive and coordinated care can ensure the proper management of such patients.

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References

1. Horne AW, Missmer SA. Pathophysiology, Diagnosis, and Management of Endometriosis. BMJ; 2022:379.
2. Horne AW, Saunders PTK. SnapShot: Endometriosis. Cell. 2019;179:1677.
3. Agarwal SK, Foster WG, Groessl EJ. Rethinking Endometriosis Care: Applying the Chronic Care Model via a Multidisciplinary Program for the Care of Women with Endometriosis. Int J Womens Health. 2019;11:405-10.
4. Kennedy S, Bergqvist A, Chapron C, D'Hooghe T, Dunselman G, Greb R, et al. ESHRE Guideline for the Diagnosis and Management of Endometriosis. Hum Reprod. 2005;20:2698-704.
5. Gholami S. icarebetter.com [Internet]. A Multidisciplinary Team for Endometriosis is Key to Positive Outcomes. [updated 2021 Sep 8; cited 2021 Dec 9]. Available from: https://icarebetter.com/multidisciplinary-team-approach-endometriosis-treatment.
6. D'Hooghe T. Hummelshoj L. Multi-Disciplinary Centres/Networks of Excellence for Endometriosis Management and Research: A Proposal. Hum Reprod. 2006;21(11):2743-48.
7. Sevilla IN, Linde FM, Sánchez MDPM, Arense JJ, Torroba A, Díaz AN, et al. Prognostic Importance of Atypical Endometriosis with Architectural Hyperplasia Versus Cytologic Atypia in Endometriosis-Associated Ovarian Cancer. J Gynecol Oncol. 2019;30(4):e63. doi: 10.3802/jgo.2019.30.e63.
8. Wallacea SL, Millerb LD, Mishra K. Pelvic Floor Physical Therapy in the Treatment of Pelvic Floor Dysfunction in Women. Curr Opin Obstet Gynecol. 2019, 31. doi:10.1097/GCO.0000000000000584.
9. Ugwumadu L, Chakrabarti R, Williams-Brown E, Rendle J, Swift I, John B, et al. The Role of the Multidisciplinary Team in the Management of Deep Infiltrating Endometriosis. Gynecol Surg. 2017; 14(1):15.