

ENDOMETRIOSIS & EXERCISE

PROFESSIONAL

WHAT IS ENDOMETRIOSIS?

It is estimated that more than 700,000 Australian women, girls and other individuals are currently living with endometriosis (1).

Endometriosis is a gynaecological condition where 'endometrial-like tissue' grows outside the uterine cavity, usually around the pelvis. It is known as 'endometrial-like tissue', as it is not identical to the cells found within the uterus, however it shares a number of similarities.

Whilst endometriosis is fuelled by the hormone estrogen, there is currently no known cause for why this tissue growth forms outside of the uterus. Unfortunately, the human body is not equipped to remove these tissue growths, and with every menstrual cycle, scar tissue and lesions can form through the associated hormone release.

The gold standard for diagnosis remains laparoscopic visualization of the lesions, allowing endometriosis to be staged. The revised American Society for Reproductive Medicine (r-ASRM) scoring system is used, objectively defining the disease as minimal (stage I), mild (stage II), moderate (stage III) or severe (stage IV). It is to be noted that the stage of disease may not correlate with symptom experienced, reproductive outcome or recurrence risk (2).

PRESENTATION OF ENDOMETRIOSIS

Individuals with endometriosis present with heterogenous features including psychological (anxiety, depression, body image), reproductive (dysmenorrhea, dyspareunia, pain at ovulation, infertility and pregnancy complications) (2, 3). Presentation of endometriosis can vary person to person, and type of symptoms present does not directly correlate with the stage of endometriosis.

HOW DOES EXERCISE HELP INDIVIDUALS WITH ENDOMETRIOSIS?

Exercise plays an important role in the treatment of, recovery and severity of symptoms of endometriosis as exercise acts to reduce estrogen levels within the body. Regular physical exercise can also have protective effects against diseases that involve inflammatory processes such as endometriosis, as it causes an increase of the anti-inflammatory and antioxidant markers within the body (4).



ENDOMETRIOSIS & EXERCISE

PROFESSIONAL

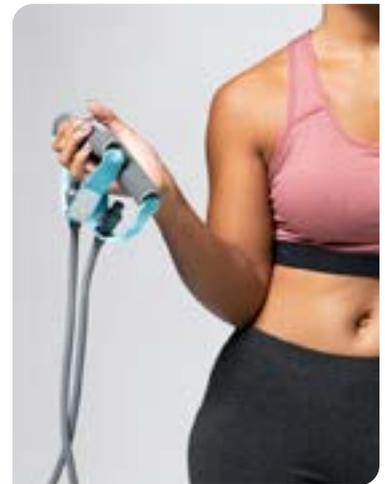
Aerobic and resistance-based (muscle strengthening) exercise is safe and beneficial. Medical clearance is required to transition into resistance training following laparoscopic surgery to ensure adequate wound healing and recovery.

There are currently no specific guidelines surrounding exercise and endometriosis, however evidence suggests that physical exercise has beneficial effects on relaxing the muscles of patients which in turn can help to break their pain cycle (5).

To maintain health, women and other individuals with endometriosis should aim for:

- Moderate-intensity physical activity (enough to “huff and puff”) is recommended. Those who are currently sedentary or engage in irregular and/or low levels of weekly physical activity should be encouraged to take up regular exercise by starting with sessions of short duration (less than 20 minutes) at low to moderate intensity, and to progress gradually (increase duration and/or intensity slowly and according to symptom control and fitness and functional adaptations).
- High impact/high intensity exercise can be contraindicated for individuals with endometriosis as it may cause a flare up of symptoms.
- Current physical activity guidelines recommend maintaining or building up to 150 minutes per week of moderate intensity activity (huff and puff) or 75 minutes of vigorous activity OR a combination. Including resistance training is important at least twice per week on non-consecutive days.
- The supervision required during exercise is dependent on the individuals exercise history, and timing in regards to diagnosis through laparoscopic surgery. While many individuals with endometriosis can exercise independently, support from a qualified health professional (Women’s Health Physiotherapist or Accredited Exercise Physiologist) may assist with commencement and adherence to an exercise program, as well as providing adequate advice regarding intensity of exercise. Those who have a preference for a particular type or intensity of exercise outside the general guidelines are encouraged to discuss the need for any risk management with a health or exercise professional.

Prepared by Brittany Anderson



RELATED INFORMATION AND REFERENCES

Exercise is Medicine Australia www.exerciseismedicine.org.au

Exercise Right www.exerciseright.com.au

Find a Physiotherapist www.choose.physio

Find an Accredited Exercise Physiologist www.essa.org.au

Endometriosis Australia <https://www.endometriosisaustralia.org/>

If you have any concerns about the safety of your patient in commencing an exercise program, please consider referral to a Sport and Exercise Physician.

Find a Sport and Exercise Physician www.acsep.org.au/

1. Australian Government Department of Health. National Action Plan for Endometriosis, 2018 [Available from: <https://www.health.gov.au/sites/default/files/national-action-plan-for-endometriosis.pdf>].
2. Johnson NP, Hummelshoj L, World Endometriosis Society Montpellier C. Consensus on current management of endometriosis. Hum Reprod. 2013;28(6):1552-68.
3. Bonocher CM, Montenegro ML, Rosa ESJC, Ferriani RA, Meola J. Endometriosis and physical exercises: a systematic review. Reprod Biol

- Endocrinol. 2014;12:4.
4. Dunselman GA, Vermeulen N, Becker C, Calhaz-Jorge C, D’Hooghe T, De Bie B, et al. ESHRE guideline: management of women with endometriosis. Hum Reprod. 2014;29(3):400-12.
5. Awad E, Ahmed HAH, Yousef A, Abbas R. Efficacy of exercise on pelvic pain and posture associated with endometriosis: within subject design. J Phys Ther Sci. 2017;29(12):2112-5.