Contraceptive choices in women with endometriosis

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Introduction

Endometriosis is a debilitating disease that impacts every facet of life. It is defined by the presence of endometrial like tissue outside the uterine cavity and commonly causes pelvic pain and infertility. In the last decade alone there has been an almost 40% increase in hospital admission due to endometriosis related ailments with over 40,000 hospital admission each year (1) This condition impacts an estimated 1 in 7 women in their teens and has been shown to take up to 7 years before a diagnosis is made (2). Furthermore, endometriosis has significant impacts on fertility with up to 30% of women undergoing IVF suffering from endometriosis and almost half of all women with endometriosis suffering infertility (3)

Laparoscopy plays a key role in the management of this disease, but symptoms commonly recur and repeat surgical exposure comes with additional risk. Medical management which is both hormonal and non-hormonal is vital in managing painful symptoms and all symptomatic women with suspected or confirmed endometriosis who are not desiring immediate fertility can be offered effective suppressive treatment to control symptoms and sometimes slow disease progression while preventing unwanted pregnancies.

Combined contraceptive pill

Most guidelines recommend offering suppressive treatment to all women with suspected or confirmed endometriosis. The combined contraceptive pill (COCP) and single agent progestogens currently remain 1st line treatments (4). A Cochrane meta-analysis showed significant improvements in dysmenorrhea, dyspareunia and dyschezia when compared with placebo (5) One prospective study showed the use of 2mg dienogest/30microgram ethinyl estradiol (Valette) when used in an extended regime in women with deep infiltrating endometriosis (DIE) resulted over 2 years in a significant reduction in non-menstrual pelvic pain (NMPP) and dysmenorrhoea. There was also a reduction in deep dyspareunia and dyschezia (6) This same cotreatment was assessed in an observational study of women with DIE and adenomyosis over 12 months and these women also showed significant improvements in cyclical and non-cyclical pelvic pain and dyspareunia despite the presence of adenomyosis. (7)

Oral progestins

These have been used in one form or another for over 50 years with several RCTs showing effectiveness in managing pain symptoms. Dienogest (Visanne) is the most investigated progestogen in recent years leading to its listing on the PBS last year. It is not however on its own licenced as a contraceptive. More recently Drospirenone has been evaluated and now listed on the PBS as of May of this year. They have not been shown to be inferior to COCP and are well tolerated. They also provide a great alternative for women who cannot tolerate estrogen.

Long acting progestogens

- The levonorgestrel intrauterine device (Mirena)
- Medroxyprogesterone acetate (Depo-Provera)

The Mirena is associated with significant improvements in endometriosis related symptoms. Compared with dienogest and the COCP, long term use of the IUD was associated with significant decreases in NMPP, back pain, menstrual pain and dyspareunia and could be sustained for up to 10 years in post-surgical patients (8) A Cochrane systematic review also showed significant improvements in dysmenorrhoea and overall quality of life when compared to expectant management. This treatment was also not shown to be inferior to the COCP. The PRE-EMPT compared long acting progestogens (LAP) including medroxyprogesterone acetate to the COCP and showed a sustained up to 40% reduction in endometriosis related symptoms however it also showed that women in the LAP arm where less likely to undergo repeat surgical procedures or require second line treatments

Conclusion

Current evidence shows that simple 1st line licenced contraceptives remain effective options for women with proven or suspected endometriosis not desiring immediate fertility. The choice of the 1st line agent is personalised and will be driven by several factors such as

- The need to avoid estrogen
- The desire to supress ovulation
- Compliance and convenience
- When they are planning a pregnancy

In the post operative setting women can be reassured that both short and long-acting contraceptives are effective but LAP may be preferred due to a small reduction in re-operative risk and progression to second line treatments

Take home messages

1. Consider the diagnosis of endometriosis in all young women with pelvic pain of any kind including dyspareunia and dyschezia
2. Oral contraceptives, both combined and single agent progestogens remain very effective treatments in women with proven or suspected endometriosis not desiring immediate fertility
3. Long-acting reversible progestogens may be associated with better tolerability and a reduced risk of repat surgical intervention and the use of second line agents

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