Sexual and reproductive health clinical consultations: problematic bleeding with the implant

Scenario

Hannah, aged 27, sees her GP to discuss having her implant removed. She has had prolonged bleeding since it was inserted 6 months ago. She usually has between 14-21 days of light bleeding each month with no associated symptoms. Prior to this Hannah had been amenorrhoiec for 4-years while taking the progestogen-only-pill (POP) but decided to switch to the implant as she wanted a more reliable method of contraception. She has no significant medical or family history. Hannah has been with her boyfriend, Jamal, for 6 months and has had no other sexual partners in that time. She had her first cervical smear and an STI screen 1 year ago which were both negative.

Expected bleeding patterns

A change to bleeding pattern is a common side effect of hormonal contraception. This change can be perceived as a benefit, usually when resulting in lighter or infrequent bleeds; but for some people, such as Hannah, unfavourable bleeding patterns lead to dissatisfaction with the method. Before inserting an implant, patients should be warned that intermittent, irregular bleeding is common. One in five users experience prolonged bleeding (lasting 14 days or more) and one in four users experience amenorrhea. Providing information on expected bleeding patterns before starting a new method could improve continuation rates.

Hannah has had prolonged bleeding since her implant was fitted 6 months ago. Her bleeding pattern might improve although evidence suggests that only half of people with an unfavourable bleeding pattern in the first few months of implant use will see an improvement with time[1]. This should be explained to Hannah to help her decide what she would like to do next.

Investigating other causes

Although changes to bleeding pattern are common, it is important to exclude underlying pathology. The GP should ask about associated symptoms (abdominal pain, fever, dyspareunia, vaginal discharge and heavy menstrual bleeding) and take a cervical screening history. They should assess the risk of sexually transmitted infections (STIs) and pregnancy. The implant has a low typical failure rate of 0.05%; however, the GP should ensure that Hannah is not taking any enzyme-inducing medication which could reduce efficacy (for example carbamazepine, topiramate or St John's wart) and that there was no pregnancy risk when the implant was inserted[1]. For patients who are bleeding and have a positive pregnancy test, ectopic pregnancy should be excluded. Hannah’s cervical screening is up to date so this does not need repeating, but an STI screen would be useful to exclude infection. An examination is advised for any patient using hormonal contraception whose bleeding symptoms persist for longer than three months or develop after three months of use[1].

Pelvic ultrasound, endometrial biopsy and hysteroscopy should be considered for patients with endometrial risk factors including obesity, polycystic ovary syndrome, insulin resistance and tamoxifen use[3]. For patients with heavy menstrual bleeding, the first line management is usually a LNG-IUD, but other hormonal contraceptives can also be beneficial due to the suppressive effect on menstruation. All patients with heavy menstrual bleeding should be referred for ultrasound or hysteroscopy as a first-line investigation, particularly if this persists despite hormonal management[4]

Managing problematic bleeding

There are a few options when it comes to managing problematic bleeding and it is important to explore Hannah's concerns and expectations.

1. Reassurance

If underlying pathology is excluded, then Hannah may be happy to continue with the implant with reassurance. However, as she is attending to discuss implant removal this may not be her expectation from the appointment.

2. Medical Management

If Hannah is otherwise happy with the implant, then it would be reasonable to trial concurrent medication for bleeding control. If there are no contra-indications, she could trial taking 3-months of the combined oral contraceptive pill (COCP) alongside the implant in a standard or tailored regimen. Continuous and flexible pill taking regimens are well tolerated and could reduce the number of bleeding days. A preparation containing at least 30 µg ethinylestradiol is likely to give better bleeding control than lower-dose preparations, and there is some evidence that estradiol-based preparations can result in shorter and lighter withdrawal bleeds[2]. Alternatively, a 5-day course of mefenamic acid could be trialled to cease unscheduled bleeding[1]. There is no evidence to support concurrent use of the progestogen-only pill (POP), but a higher dose of progestogen could theoretically induce amenorrhea and is widely used in clinical practice**Error! Bookmark not defined.**. Use of oral contraceptives this way is off-licence and the decision to continue this long term is based upon clinical judgement. Bleeding patterns might remain settled if oral contraception is stopped; however, risk of venous thromboemobolism is highest in the immediate months after initiating COC, therefore frequent starting and stopping of this method is discouraged. A summary of current evidence on medical management of bleeding with the implant is provided in Table 1.

Method	Evidence
Combined oral contraception	A short course (14 days or 28 days) of COCP was found to reduce the number of bleeding days or result in bleeding cessation. Follow-up periods were short so subsequent bleeding patterns are not evidenced. Guidelines suggest a 3-month trial of COCP if there are no contra-indications
Mefenamic Acid	A 5-day course of mefenamic acid was shown to reduce the number of bleeding days. Follow-up periods were short so subsequent bleeding patterns are not evidenced. Guidelines suggest a 5-day trial of mefenamic acid if COCP is contra-indicated
Other methods: • Tranexamic acid • Doxycycline • Mifepristone • Tamoxifen • Ulipristal acetate	Guidelines do not currently support use of any of these methods for medical management of bleeding on the implant due to inadequate evidence of their effectiveness

Table 1: A summary of the evidence for medical management of bleeding with the implant[1]

3. Removal or switching to an alternative method

If Hannah's implant is removed, then her bleeding will most likely return to its natural cycle. It is important to explain to Hannah that her fertility can return immediately and discuss contraceptive options if she wishes to avoid pregnancy. She could switch to a non-hormonal method, or a hormonal method with a more favourable expected bleeding pattern, such as the LNG-IUD, progestogen-only injectable (DMPA), combined hormonal contraception (CHC) or drospirenone POP[2].

Outcome

The clinician did a cervical examination which was normal and an STI screen which was negative. Hannah was not happy with her current bleeding pattern, so they discussed removing the implant or managing her bleeding using medication (figure 1). It was important to Hannah that she had a

reliable method of contraception, so the clinician signposted her to the contraception choices website to read about alternative methods in more detail[5]. Hannah returned one week later and decided to trial 3-months of the COCP alongside her implant. She chose a flexible pill-taking regimen which resulted in infrequent withdrawal bleeds. At her 3-month follow-up she chose to continue the COCP alongside her implant as it provided her with a reliable form of contraception and a manageable bleeding pattern. She was advised to attend for annual review to assess her ongoing suitability for the COCP.

Figure: Assessing and managing bleeding on the implant[1,2]

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[1] Faculty of sexual and reproductive health. FSRH guidelines: progestogen-only implant (2021). 2021 (Amended 2023)

[2] Faculty of sexual and reproductive health. FSRH Clinical Guidelines: Problematic bleeding on hormonal contraception (2015). 2015

[3] British gynaecological cancer society (BGCS). BGCS Uterine cancer guidelines: recommendations for practice (2021). 2021

[4] National Institute for Health and Care Excellence. Heavy menstrual bleeding assessment and management (2018). 2018 (updated 2021)

[5] University College London. Contraceptive Choices https://www.contraceptionchoices.org/