Avon CASH Group Case

Contraception for women with an eating disorder

Case 1

Sarah is 18 and attends requesting contraceptive advice.

On taking a history she tells you that her periods are very irregular, and she hasn't had a period for 3 months.

On examination her BMI is 17.5.

She has had a regular boyfriend for the past 9 months. They use condoms intermittently.

What else do you want to ask Sarah?

As per Obesity ask if OK to talk about weight – think about how you would ask – consider something like "I notice that your BMI is very low / you told me that your periods have stopped – this may be because your weight is very low… " – explain may have implications for contraception choice.

Ask directly if patient has an eating disorder.

However often patients with an eating disorder will deny any problems.

Consider use of SCOFF questionnaire:

Do you:

- Make yourself SICK when you feel uncomfortably full?
- Worry you have lost CONTROL over how much you eat?
- Recently lost more than ONE stone within 3 months?
- Believe you are FAT when others say you are too thin?
- Would you say that FOOD dominates your life?

Don't forget to do pregnancy test!

Ask about any co – existing medical conditions:

Women with anorexia are at increased risk of developing cardiac abnormalities, including bradycardia, low blood pressure and prolonged QT interval.

Worth doing BP and P – especially if considering IUD fit.

Sarah tells you:

- Diagnosed with anorexia nervosa 9 months ago.
- Current BMI 17.5 (has been as low as 16).
- Under care of psychiatrist and GP.
- Started on olanzapine 3 months ago − improving slightly.
- Periods irregular for last 18 months − stopped completely 3 months ago.
- No other medical problems.
- Makes herself sick regularly and uses laxatives as well as restricting dietary intake.
- Terrified that hormonal contraception will make her fat.

Based on the information you are given (by the facilitator) what contraceptive advice would you give Sarah?

Background information:

Anorexia:

Some studies suggest:

Affects up to 1 % of women.

Affects 0.5 – 1% of adolescents.

FSRH statement:

The true prevalence of eating disorders is not known as available statistics relate to those receiving care and so do not reflect the unmet need in the community. Annual UK incidence rates have been estimated at around 63 per 100 000 women of all ages and are highest among 15–19-year olds.

Diagnosis:

DSM 5 Criteria = Diagnostic and Statistical Manual of Mental Disorders – American Psychiatric Association

1. Persistent restriction of energy intake leading to significantly low body weight. (in context of what is minimally expected for age, sex, developmental trajectory, and physical health)

2. Either an intense fear of gaining weight or of becoming fat, or persistent behaviour that interferes with weight gain (even though significantly low weight).

3. Distorted body image.

4. Amenorrhoea for 3 months – THIS HAS BEEN REMOVED FROM DIAGNOSTIC CRITERIA

There are two main sub-types of anorexia:

Restricting type:

This is the most commonly known type of Anorexia Nervosa whereby a person severely restricts their food intake.
Restriction may take many forms (e.g. maintaining very low calorie count; restricting types of food eaten; eating only one meal a day) and may follow obsessive and rigid rules (e.g. only eating food of one colour).

Binge-eating or purging type:

Less recognised.
A person restricts their intake as above, but also during some bouts of restriction the person has regularly engaged in binge-eating OR purging behaviour (e.g. self induced vomiting, over-exercise, misuse of laxatives, diuretics or enemas).

Aetiology unknown – few risk factors identified.

Predominately girls and young women.
Onset usually in adolescence.
Onset is rare after age 40.
Western Society views on weight.
In Western society, obesity is considered unattractive and unhealthy, and the desire to be thin is pervasive, even among children.
It is thought that more than 50% of prepubertal girls diet or take other measures to control their weight.
Excessive concern about weight or a history of dieting appears to indicate increased risk.
Some genetic predisposition probably exists (–studies of identical twins have shown a concordance of < 50% - concordance is lower in fraternal twins).

Many patients belong to middle or upper socioeconomic classes, are meticulous and compulsive, have average intelligence and have very high standards for achievement and success.

Vomiting and Laxative Misuse:

Oral contraception (OC) is absorbed from the small intestine and the FSRH guidance Drug Interactions with Hormonal Contraception states that absorption may be affected indirectly by drugs that cause vomiting or severe diarrhoea, or by drugs that alter gut transit. The prevalence of laxative misuse has been reported to range from approximately 10% to 60% of individuals with eating disorders. However, there is very limited direct evidence regarding laxative misuse and impact on oral contraceptive efficacy.

It is therefore important to try to establish directly with women with eating disorders whether they have ever practised self-inducing vomiting or use laxatives. Clinicians should then advise non-oral methods of contraception including LARC methods. If a woman still wishes to use OC, she must be advised regarding the need for a repeat dose if she vomits within 3 hours of pill taking and extra precautions if she has severe diarrhoea for >24 hours.

Long Acting Reversible Contraception (LARC) methods

The most effective methods of contraception are the implant and intrauterine methods. These LARC methods have a significantly lower failure rate with typical use than other methods, and therefore should be considered as first line in women with an eating disorder for whom avoiding pregnancy until the condition is in remission is a priority.

There are a few factors that LARC providers need to be aware of in relation to women with eating disorders. Clinicians should be aware that patients with a history of an eating disorder may have little subcutaneous tissue which could theoretically increase the risk of deep implant insertion. Extra care should be taken to ensure subdermal placement. The FSRH CEU recommends that subdermal implant insertion is carried out by an experienced, qualified clinician. Women can be advised that implants may be slightly more visible if they have very thin arms.

It is possible that a woman with an eating disorder and amenorrhoea could have an atrophic uterus with short uterine cavity. In such circumstances, the clinician inserting IUC should have one of the smaller intrauterine devices available.

Examples of shorter IUD include – mini TT380 slimline, UT380 short, Flexi T 300.

Table 2 Examples of available methods of intrauterine contraception

Examples of devices available in the UK[a]	Copper surface area (mm^2)	Manufacturer's licensed duration of use (years)	Manufacturer's recommended uterocervical length[b] (cm)	Diameter of insertion tube (mm)
Levonorgestrel intrauterine system				
Mirena®	Not applicable	5 (contraception and idiopathic menorrhagia) 4 (endometrial protection)[c]	Not specified	4.40
Jaydess®	Not applicable	3 (contraception only)	Not specified	3.80
Copper devices (banded copper arms)				
Copper T 380A®	380	10	6.5–9.0	4.75
TT380 Slimline®	380	10	6.5–9.0	4.75
MiniTT 380 Slimline®	380	5	≥5	4.75
T-Safe 380A® Quickload	380	10	6.5–9.0	4.75
T-Safe 380A® Capped[d]	380	10	6.5–9.0	4.50
Flexi-T 380®	380	5	>6	4.75
Copper devices (copper in stem only)				
Nova-T 380®	380	5	6.5–9.0	3.60
UT 380®	380	5	6.5–9.0	
UT 380 short®	380	5	≥5	
Flexi-T 300®	300	5	>5	4.75
Multiload Cu375®	375	5	6–9	3.60
Multisafe 375 Short Stem®[d]	375	5	5–7	3.85
Copper device (frameless)				
GyneFix Viz 330®	330	5	Any	4.00

[a]List not exhaustive; generic versions of the above devices are also available.
[b]Distance measured with uterine sound from upper limit of the endometrial cavity to external cervical os.
[c]FSRH guidance supports the use of the LNG-IUS (Mirena®) for 5 years for endometrial protection (see page 11).
[d]Product not currently on National Health Service Drug Tariff.

Women with anorexia are at increased risk of developing cardiac abnormalities, including bradycardia, low blood pressure and prolonged QT interval. Although a pre existing slow pulse or low blood pressure could increase the chance of a patient having a vasovagal episode during or after IUC fitting, this is not a contraindication to the initiation of IUC. Clinicians should be aware that long QT syndrome is UKMEC 3 for initiation of IUC and may wish to liaise with a cardiologist regarding best practice. As always, clinicians should be alert to the risk of vasovagal reaction at insertion for women who have not eaten that day.

Bone health:

It is estimated that over 90% of women with anorexia demonstrate osteopenia and almost 40% demonstrate osteoporosis at one or more skeletal sites.

CHC is frequently prescribed for young women with anorexia as prevention against and treatment for low BMD. However, systematic reviews of pharmacological treatment options for low BMD and secondary osteoporosis in anorexia have concluded that administration of combined oral contraception (COC) was not effective in increasing BMD in women with anorexia. It is possible that estrogen treatment alone cannot correct the multiple factors (nutritional, other hormonal) contributing to loss of BMD. There is no evidence relating to the use of estradiol COC preparations in women with anorexia and limited, inconclusive evidence on the use of hormone replacement therapy for BMD maintenance in adolescents with anorexia. **It is important that women with anorexia are not falsely reassured that use of CHC protects against osteoporosis in the absence of weight gain.**

A systematic review undertaken by the National Institute for Health and Care Excellence (NICE) concluded that there is conflicting evidence that DMPA lowers BMD in the general population. NICE recommends that women be informed that there is an association between DMPA and a small reduction in BMD which is largely recovered when DMPA is discontinued. There has been concern about use of DMPA in women aged <18 years (who have not yet attained their peak bone mass); this age group is UKMEC category 2 for use of DMPA (advantages outweigh theoretical or proven risks). The FSRH CEU were unable to find any evidence for the effect on BMD of use of DMPA by women with anorexia. **However, since anorexia is a significant risk factor for osteoporosis, the use of DMPA by women with anorexia requires careful informed discussion and consideration by the woman**