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BOMSS GP consultation guide for post-bariatric surgery annual reviews

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This guide should be read in conjunction with the other GP guidance available on the British Obesity and Metabolic surgery Society (BOMSS) website.

Each patient should have blood tests as recommended (O'Kane, NICE CG189) followed by a medical review annually **FOREVER.** GPs should review co-morbidities and medication as appropriate.

If doing a complete review they should also screen for complications of bariatric surgery (abdominal pain, dumping, symptoms of nutritional deficiencies), make a brief dietary assessment, and consider psychological issues as appropriate.

Please note that if a person had a diagnosis of type 2 diabetes pre-surgery they should remain on the retinopathy screening programme and have diabetes annual reviews FOR LIFE even if they have achieved normoglycaemia and no longer require any diabetes medication.

People using CPAP for obstructive sleep apnoea should continue using it until reviewed and advised to stop it by their respiratory team.

This document describes a brief guide to a GP consultation when conducting an annual review for a patient following bariatric surgery. It aims to help GPs structure the consultation and acts as an aide memoire for important areas to cover with the patient. If any concerns are identified regarding potential complications from surgery we would always advise contacting the bariatric unit for advice. BOMSS post-bariatric nutritional guidance for GPs also includes some advice on complications related to nutritional issues as well as tables of the nutritional screening and supplementation recommended.

The consultation should be supportive and empathetic. Many of these patients will have experienced longstanding discrimination and stigmatizing behavior, including from healthcare professionals. Indeed, previous bad experiences with healthcare professionals can lead to a reluctance to consult and drop out from follow-up. If the BOMSS pre-consultation questionnaire for patients is used in conjunction with this guidance, it should be as a supportive guide and basis for discussion, not as a test of behavioral compliance.

The development of this tool was funded by a bequest from Rona Marsden to the Fakenham Medical Practice.

Key questions to ask during the consultation

Weight & surgical history questions

- Type of surgery - both primary and revision surgery (if applicable)
  (*i.e. gastric band, gastric bypass, sleeve gastrectomy, one anastomosis gastric bypass, single anastomosis duodenal ileal bypass, biliopancreatic bypass/duodenal switch, for more information on the procedures please click here*)
- Date of surgery
- Hospital where surgery was performed
- What was the patient's weight before bariatric surgery?
- What was their lowest weight after bariatric surgery?
- What is their current weight?
- Is their weight steady or has it changed in the last 3 months?
  - If so, is it going up or down?

Note: Tips for weight loss maintenance are available from the European Association for the Study of Obesity website here. If the patient is losing weight unintentionally this should be investigated and managed as for any patient.

If their weight is increasing rapidly, or decreasing more than expected consider referral to a bariatric dietitian or specialist weight management (Tier 3 or 4) service.

Specific medication questions

- Is the patient taking the same vitamin supplements recommended by the bariatric surgery unit as when discharged?
  - If not check that the current supplements contain the recommended vitamins and minerals, if you are unable to confirm this either contact the original bariatric unit or local Tier 3 service for advice or refer to a bariatric dietitian.
- Have any comorbidities improved or resolved and if so, do drugs need reviewing or stopping?
- Is the patient on any pharmacotherapy for obesity post-surgery? If so, is there a clear arrangement in place for who is prescribing and monitoring it?
- Review the formulations of current medications - are they clinically appropriate?
- For more details on medications post-bariatric surgery, please see the BOMSS guidance on medications post-bariatric surgery for GPs)

Note: Avoid NSAIDS or drugs likely to cause gastric irritation including slow-release preparations. Effervescent tablets may cause discomfort. Operations bypassing sections of small bowel may affect certain drug absorptions (see the BOMSS guidance on medications post-bariatric surgery for GPs)

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Nutritional assessment questions

- In addition to looking at the results of the blood tests, and actioning abnormal results a simple dietary history is recommended. Post bariatric surgery patients are at risk of vitamin (thiamine, vitamin D and B12 (and for some procedures vitamins A,E and K)) and mineral deficiency, nutritional anaemia (iron, vitamin B12, folate or copper deficiency), osteoporosis and protein malnutrition. Information on this is available in the BOMSS post-bariatric surgery nutritional guidance for GPs. *We would also advise contacting an appropriate specialist as needed.*
- Patients may develop food intolerances, or struggles with specific textures such as meat. Consequently, they may select foods which are easier to eat, often called 'slider foods' of poor nutritional quality such as crisps, biscuits and chocolate. This can affect their protein intake and increase the risk of protein malnutrition.
- It is useful to ask whether the patient is vegetarian or vegan, follow a specialist diet or have any food allergies. If so, they may need a review by a dietitian.
- There is a BOMSS pre-consultation questionnaire for patients, which can be used, and if completed by patents prior to the appointment and brought to the appointment it can help guide the consultation. This is not a validated questionnaire but is a simple screening tool based on evidence and clinical experience.
- General recommendations for dietary intake include having three regular meals a day, plus healthy snacks. **Note:** continuous grazing or chaotic eating patterns are associated with weight regain.
- Recommend patients drink either 30 minutes before a meal, or 30 minutes after a meal rather than with food to avoid filling the stomach pouch with liquid, which may reduce food intake and worsen dumping syndrome (a complication that can occur post-surgery for some patients

Specific questions to ask in nutritional assessment (as detailed in pre-consultation questionnaire for patients)

- How many meals do you have a day?
- Which is your main meal?
- How many snacks do you have a day? What type of snack?
- Do you have large time gaps between eating?
- Ask sensitively about alcohol intake (*some patients can have issues with alcohol or substance misuse post-surgery*)

Note: If they have more than 3 meals a day, or more than 3 extra snacks a day they might need to cut this down if their weight is increasing.

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Other specific dietary questions to ask

How easily can you eat meat? (beef, lamb, pork, goat, venison)	Easily	With some difficulties	Not at all	Never eat meat
How easily can you eat poultry? (chicken, turkey, duck)	Easily	With some difficulties	Not at all	Never eat poultry
How easily can you eat fish?	Easily	With some difficulties	Not at all	Never eat fish
How easily can you eat salad & vegetables?	Easily	With some difficulties	Not at all	Never eat salad and vegetables

If vegan or vegetarian assess protein intake from appropriate sources as per BOMSS pre-consultation questionnaire for patients.

Note: It can be a problem if patients are not eating enough protein (meat/eggs/fish/cheese/pulses) or fruit and vegetables. All patients need at least 60g of protein a day, every day after bariatric surgery. They should aim to have 20g of protein at each main meal. Protein snacks may also be useful. If their diet is low in protein, or restricted in any way they may need dietetic referral. *Please see appendix* at end of the guide for a useful guide to protein content in foods.

- How many portions of fruit and vegetables are you having a day?
  - At least 5 portions of fruit and vegetables are recommended to get enough vitamins, micronutrients and fibre.
- Are you drinking fizzy and/or high sugar drinks?
  - Fizzy drinks may make acid reflux worse, and high sugar drinks should be avoided.
- What type of milk do you drink, and do you eat dairy products?
  - If they drink less than half a pint of cow's milk a day they may be a risk of low calcium, and osteoporosis. They may require calcium and vitamin D supplementation and/or dietitian referral.

Note: A portion is a handful of berries, 1 apple, 1 small banana, 2 satsumas. A portion of vegetables is 3 tablespoons. Potatoes are not included as vegetables.

Additional questions

- Do you get heart burn? If so how often?
- Does food get 'stuck'?
- Do you vomit or regurgitate after food (get the foams)? If so, how often?
  - If you do vomit is it related to specific food?
- Are there any foods that you avoid?
- Do you experience 'dumping syndrome? (episodes of feeling shaky, clammy, sick or faint after eating sugary or fatty foods, sometimes followed by diarrhoea). If so how often?

Note: If they are experiencing dumping syndrome symptoms frequently they need referral back to a specialist bariatric dietitian or Tier 3 service. Dumping can usually be managed by dietary modification, but can be hard to distinguish from reactive hypoglycaemia and may require investigation if severe. More information on this is available in the BOMSS overview of GP management of patients post-bariatric surgery.

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Regular vomiting should **NOT** occur, and may be a sign of problems. **Repeated vomiting in those eating in the recommended pattern may need to be investigated.** People are at risk of developing thiamine deficiency if they experience prolonged vomiting, rapid weight loss, poor dietary intake, alcohol abuse, oedema or symptoms of neuropathy. Symptoms of thiamine deficiency include ataxia, confusion, coma, neuropathy, neuritis or cardiac insufficiency. If thiamine deficiency is suspected, either because of risk factors or clinical symptoms, oral or intravenous treatment should be initiated immediately and not delayed pending tests results.

Other areas to discuss at review appointment

Contraception and pregnancy

Oral contraceptive tablets may not be fully absorbed so discuss contraceptive options using current guidelines (see below). If they are planning pregnancy or become pregnant you should refer them to a bariatric specialist as soon as possible as they need advice on changing vitamin supplements to avoid those containing vitamin A, and they may need high dose folic acid 5mg. If they become pregnant you should also refer them urgently for consultant-led obstetric care. Follow current recommendations on managing women with BMI >30 kg/m^2 as appropriate.

Ask about other key symptoms that may raise concerns

Abdominal pain can have multiple causes in these patients and may need investigation. Patients can also experience problems such as hair loss or nail changes (for example due to rapid weight loss or iron or zinc deficiency), night blindness (vitamin A deficiency), problems with pins and needles or numbness (vitamin B12, folate or copper deficiency) and problems with excess skin. A traffic light diagram for the primary care management of some of the key complications following bariatric surgery is here.

Remember to discuss psychological aspects

Dramatic weight loss can be welcome but may be associated with difficulty adapting to a new body image and body dysmorphia can occur. This can also impact relationships with friends and family. There is some associated muscle loss, and people may notice reduced muscle strength which can be a particular problem for some men. Individuals may also develop a fear of food and express significant worries about future weight gain. It may be helpful to explore whether thoughts and feelings around these issues are impacting on their health behaviours.

Depression and anxiety can occur, and this can be a problem if weight is regained after surgery. Most people living with obesity and overweight have experienced weight stigma in the past and may have a tendency to blame themselves if weight gain occurs (despite this being a biologically driven phenomenon and expected to some extent after bariatric surgery). Previous bad experiences with healthcare professionals can lead to them becoming reluctant to consult under these circumstances and lead to drop out from follow-up just when they need help most.

There is a recognised association with new addictions, gambling, alcohol, drugs and overspending even in those who did not have these issues prior to surgery. Ask about these issues sensitively during the consultation. Consider referral to a mental health practitioner or psychologist as appropriate.

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Ask whether they attend a support group, either linked to their surgical unit or national. If not offer information on organisations that offer support (see below).

Specific psychological wellbeing questions

- How are you and the people around you adjusting to the changes in your body and your behaviour?
- How are you coping with the post-surgery adjustment?
- Have you noticed that you have started up any new positive or negative behaviours since the surgery? Are any of these causing you unintended difficulties?
- How do you feel about managing your weight and your health in the long-term future?
- Do you have people you can talk openly to about your thoughts and feelings?
    - If not, please suggest the resources and forums below for support options.

Note: It can be helpful to ask permission to talk about psychological wellbeing before asking these questions and highlight that it is incredibly common for people to have some psychological struggles in their post-surgery journey.

Other resources

Dr Denise Ratcliffe has written a very helpful book which you could recommend - Living with Bariatric Surgery Managing your Mind and your Weight. ISBN 9781138217126, Routledge 2018,

The book, 50 Ways to Soothe Yourself Without Food by Susan Albers may also be helpful to suggest.

It may be helpful to signpost organisations that help support people living with obesity:

- Tips for weight loss maintenance after bariatric surgery European Association for the Study of Obesity website.
- Obesity UK: a charity that supports people living with obesity including online support groups. https://www.obesityuk.org.uk/
- Obesity Empowerment Network (OEN): an advocacy organisation to give people affected by obesity a public voice.
- European Coalition of People living with Obesity (ECPO): works collaboratively across Europe to improve the lives of people who are living with obesity through advocacy, policy and education.
- Irish Coalition of People living with Obesity (ICPO): works collaboratively in Ireland to improve the lives of people who are living with obesity through advocacy, policy and education.

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Appendix

Guide to protein content in bariatric portion of food		
Food Portion	***Portion***	***Protein***
Milk	200ml	7g
Skimmed milk powder	20g	7g
Soya milk	200ml	6g
Low fat Greek Yogurt	150g (small pot)	7g
Hard cheese (e.g. Cheddar)	25g (small matchbox size)	6g
Low fat cottage cheese	75g	10g
Eggs	2 large	16g
Red meat	75g	22g
Chicken	75g	22g
Fish	75g	18g
Mixed beans	200g	12g
Baked beans	200g	10g
Lentils cooked	100g	8g
Quorn mince	75g	8g
Nuts	25g	5g

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