Bariatric surgery patients and their medicines

Additional resources available

Bulletin Implementation tools

http://www.prescqipp.info/resources/viewcategory/226-bariatric-patients-and-their-medicines

In 2006 NICE published guidelines on obesity (CG43) and it recommended the use of bariatric surgery as a treatment option for patients that met certain criteria.[1] The result has been a steady increase in bariatric surgery.[2] The pharmacokinetics of drugs can be altered in the bariatric surgery patient so the optimisation of their medicines should be tailored to the individual.

Recommendations

The effects of bariatric surgery can vary between patients but some general advice for managing medication are as follows:

- Review patient's medication regularly. Practice pharmacists and community pharmacists may be best placed to carry out these reviews.
- Monitor for decreased efficacy of medications.
- Monitor for side effects and signs of toxicity, a possible result of increased bioavailability.
- If efficacy is reduced consider change of formulation or route, or alternative medications with more favourable pharmacokinetics.
- Doses of medications for chronic conditions, e.g. antihypertensives and diabetic medication, may decrease as weight loss occurs so these medicines should be regularly evaluated.
- Discuss any drug changes with the patient and communicate them to other health professionals involved in the care, including the community pharmacist dispensing the medicines.

Further prescribing information

Formulation/drug	Advice
Solid dosage forms	Refer to 'PrescQIPP Bulletin 48: Liquid formulation requirements in bariatric surgery patients'[3]
Liquid formulations	Staggering may be necessary due to the reduced capacity of the stomach. Consider licensed higher strength liquid formulations to reduce the volume of each dose.
Products (including over-the-counter medicines) that contain a large amount of sucrose, corn syrup, lactose, maltose, fructose, honey and mannitol	**Avoid** to minimize risk of dumping syndrome in gastric bypass patients.[4,5]
Effervescent, enteric coated and sustained or delayed released formulations	**Avoid** due to potential build-up of gas and excess sodium content.[5]
Drugs that potentially damage gut mucosa, e.g. non-steroidal anti-inflammatory drugs (NSAIDs), bisphosphonates and aspirin	**Avoid**. Possible alternatives to oral bisphosphonates are raloxifene, denosumab or teriparatide.[5,6]
Diuretics	**Avoid** unless clearly indicated.
Drugs with a narrow therapeutic index	Be cautious and monitor.
Acidic solid dosages forms, e.g. rifampicin, digoxin, simvastatin, ketoconazole and iron supplements	The solubility and disintegration can be decreased due to the less acidic environment. Co-administering ascorbic acid with iron supplements converts the iron into an absorbable ferrous form. Alternatively use a different salt, e.g. calcium citrate will be better absorbed than calcium carbonate.[7,8]
Lipophilic drugs, e.g. ciclosporin, phenytoin, rifampicin, and levothyroxine	Will have decreased absorption and will require close monitoring and possibly dose adjustments.[8]
Vitamins	Gastric bypass patients will need life-long supplementation of fat soluble vitamins, i.e. vitamins A, D, E, K.[5,7] Gastric bypass and gastric sleeve patients will need vitamin B12 supplementation. Monthly vitamin B12 injections can be given.[5,7] Deficiencies are less likely in gastric band patients.[5,7]

References

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