Bariatric surgery for patients with type 2 Diabetes
A retrospective review

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Next 10 minutes...

- Background
- Evidence
- Audit results
- Summary
Background

• Obesity: Main modifiable risk factor in persons with poor control of T2DM

• Bariatric surgery could result in remission of Type 2 Diabetes mellitus

• Evidence available with randomised controlled trails

• Guidelines and algorithms changing internationally
STAMPEDE

Results: Significantly More Diabetic Patients at Glycemic Control with Bariatric / Metabolic Surgery

Glycemic control: HbA1c < 6.0% with or without diabetes medications, 12 mo after randomization. Figures adapted from study data.
Mingrone Study

- Glycated Hemoglobin Levels during 2 Years of Follow-up
Bariatric surgery for type 2 Diabetes

- **ADA 2011**: For people not responding adequately to lifestyle measures and Metformin in persons with BMI > 35.

  BMI 30-35: Evidence being reviewed

- **IDF Position statement**: Surgery accepted option in people who have type 2 diabetes and BMI of 35 or more. BMI 30-35, surgery should be discussed

- **NICE UK**: BMI more than 30 and recent onset type 2 Diabetes
Audit of bariatric surgery

• Audited practice of bariatric surgery in JCUH based on NICE criteria and NCEPOD standards

• Presenting the results with a focus on type 2 diabetes patients operated
Audit

• 75 consecutive patients reviewed
• NICE criteria and NCEPOD standards
• 16 with Type 2 Diabetes (21%)
• Procedure type, weight, HbA1c, diabetic medications
  • Pre-operative, 6 and 12 months
Results

• Total 16 with type 2 Diabetes

• 44% had sleeve gastrectomy (N=7)

• 56% had RYGB (N=9)
Weight (n=16)

- Mean pre-operative weight 122.5kg (86.8-153)
- Mean weight at 6 months 99kg (66.8-132.8)
- Mean weight at 12 months 96.2kg (66.2-126.8)
- Mean excess weight loss 48.4% (3-91)
Weight (n=16)

Weight Change in Patients with Diabetes

- **PRE-WEIGHT**
- **6 MONTH WEIGHT**
- **12 MONTH WEIGHT**

- **Weight in kg**
- **Patient Number**
HbA1c (n=16)

- Mean pre op. 55.4 (36.6-92.4: Median 51.4)
- Mean 6 months 42 (32.2-55.2: median 41)
- Mean 12 months 40 (32.2-47.0, median 38.8)
- All patients less than 47 at 12 months
- No difference between procedures
- Continued with Metformin
HbA1c
Diabetes medications

• 81% had medications optimised pre-operatively

• 3 had HbA1c more than 58, but on full treatment including high dose insulin

• 75% were assessed by the diabetes consultant pre-operatively

• Now it is 100%
Summary

• Obesity is a major, modifiable driving force for type 2 diabetes
• Weight reduction has major benefits
• Bariatric surgery causes remission in significant number of patients
• Audit showed better results: Selection bias
• Careful selection of patients needed
Take Home message

- Bariatric surgery should be part of treatment algorithm for Type 2 diabetes with obesity
- National and international guidelines support
- Bariatric surgery and weight management services widely available in our region
- Careful selection and preparation is essential
Take home message

- Next time in the diabetes clinic...
- Patient with BMI more than 30, with poor glycaemic control, do carefully discuss bariatric surgery as an option
Thank you