



# Early results of Primary Obesity Surgery Endolumenal (POSE)

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## Introduction

Surgery for morbid obesity is effective but has complications. Less invasive methods in treatment of obesity are being pursued. Transoral endoscopic methods are used in managing complications and as revisional procedures following obesity surgery. Transoral methods are attractive in that they are scarless and less invasive. Primary treatments of obesity using endolumenal approach are being developed and early results are encouraging.

The aim of our study is to assess the safety and short-term results of Primary Obesity Surgery Endolumenal (POSE).

## Methods

We performed a retrospective analysis of prospectively collected data of 20 patients who underwent POSE from March 2011 to November 2011 in a private hospital. A single surgeon performed all procedures under general anaesthesia.

POSE involves plication of the gastric fundus and antrum with a g-Cath™ Tissue Anchor Delivery Catheter with Expandable Tissue Anchors using a TransPort™ Multi-lumen Operating Platform (Fig 1), endoscopy and g-Prox® Tissue Grasper/Approximation Device. (Fig 2)



Fig 1: TransPort™ Multi-lumen Operating Platform



Fig 2: g-Prox® Tissue Grasper/Approximation Device

## Results

All 20 patients underwent POSE successfully. The male to female ratio is 1:4. The mean age was 48 years (range 33-62 years). The length of stay was 1 day for the first 12 patients and the subsequent 8 patients went home the same day. All patients described varying levels of pharyngitis, which resolved in 1-2 days. One patient suffered hematemesis post procedure and underwent gastroscopy, but the bleeding stopped spontaneously - he required blood transfusion. There was no conversion to other procedures or deaths.

Six patients were excluded from analysis (2 patients were lost to follow up and 4 patients had procedure in the last 4 weeks). The average follow up was 4 months (range 2-7 months). The mean BMI and mean weight at the time of POSE were 34.6 kg/m<sup>2</sup> (range 27- 45 kg/m<sup>2</sup>) and 98.9 Kg (range 68 kg - 131 kg) respectively. The mean weight and mean percentage excess body weight loss were 86.8 kg (range 63 kg- 113 kg) and 42.1% (range 0 %- 102%). The average weight loss is 9.7 kg (range 0 - 22 kg).

<b>Male/Female</b>	<b>1:4</b>
<b>Age</b>	<b>48 Years (33-62 years)</b>
<b>Average follow up</b>	<b>4 months ( 2-7 months)</b>
<b>Mean Weight (range)</b>	<b>98.9 Kg (68-131 kg)</b>
<b>Mean BMI (range)</b>	<b>34.6 kg/m<sup>2</sup> ( 27- 45 kg/m<sup>2</sup>)</b>
<b>Mean Weight loss (range)</b>	<b>42.1% ( 0 %- 102%).</b>
<b>Mean EBWL % (range)</b>	<b>9.7 kg (0 - 22 kg).</b>

## Conclusion

POSE can be safely performed and 42% EBWL achieved in short follow up is encouraging. Long term follow up results will define the role of POSE in management of obesity.

## References

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