RANDOMISED CONTROLLED STUDY COMPARING INTRAOPERATIVE AND POSTOPERATIVE PARAMETERS AND WEIGHT LOSS AFTER LAPAROSCOPIC SLEEVE GASTRECTOMY IN MORBIDLY OBESE PATIENTS USING 36 FR AND 42 FR BOUGIE

PAWANINDRA LAL[#] MS, DNB, FRCS (Ed, Glasg, Eng, Ire,), FACS, FAMS, **AMAN BATISH**[@] MBBS, MS, MCh,
ANUBHAV VINDAL[#] MS, DNB, FRCS (Ed,Glasg), FCLS, FACS **TUSHARINDRA LAL***[*] MBBS
#Department of Surgery, Maulana Azad Medical College, New Delhi, @ Paras Hospital, Chandigarh, * SRIHER, Chennai.

Introduction

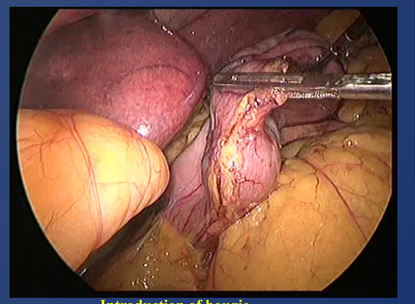
Laparoscopic sleeve gastrectomy (LSG) has been increasingly offered to bariatric patients and has emerged as the definite standalone procedure for this ailment. Size of bougie used to fashion a sleeve during LSG has varied from surgeon to surgeon and there is no consensus on optimum bougie size for the procedure. Larger bougies creating a broader sleeve have been shown to have a definite lower complication rate, while smaller bougies are considered to create narrower sleeve with better weight loss at the cost of higher complications. There is a reason therefore, to scientifically assess the ideal orogastric bougie size to make LSG a safe procedure. This study was designed to compare the intra operative and postoperative parameters, weight loss, complications and resolution of co-morbidities after LSG using size 36 Fr and 42 Fr bougie for creation of sleeve.

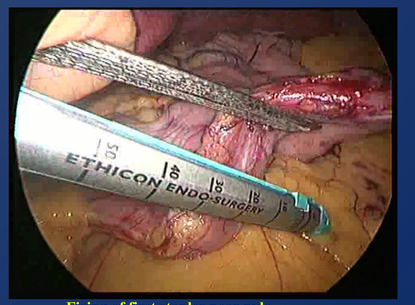
Materials and Methods

A total of 20 patients (17 females and 3 males), age ranging from 18 to 65 years who fulfilled the inclusion and exclusion criteria were evaluated. Patients were randomly assigned into two groups for undergoing LSG with bougie size 36 Fr (group A) and 42 Fr (group B). Postoperatively, patients were evaluated every 2 weeks for a period of 3 months for weight loss, resolution of co-morbidities and complications.

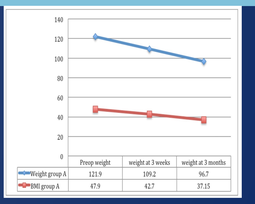
Results

A total of 20 patients underwent LSG during the study period. Patients were randomised into two groups. These groups were comparable with similar preoperative parameters. There were no intra-operative or post-operative complications. Absolute weight loss at 3 months was 25.2 kg and 27.04 kg in Group A and Group B respectively (p=0.001). Reduction in BMI was 10.021 and 10.79 in Group A and Group B respectively (p=0.001). Mean BMI and %EWL in group A at 3 months was 37.9 kg/m2 and 40.54% as compared to 38.5kg/m2 and 44.011% in group B, however the difference between the two groups did not achieve statistical significance. There was 100 % resolution of hypertension and diabetes mellitus in all cases in both groups.

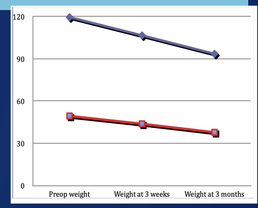

Introduction of bougie



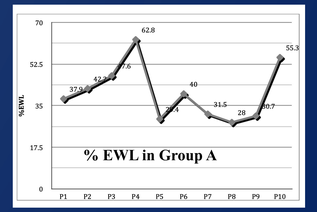
Firing of first stapler near pylorus

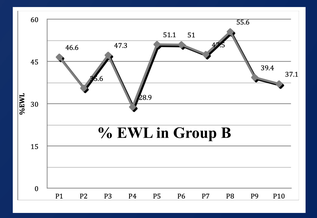


Progression of weight and BMI in Group A



Progression of weight and BMI in Group B





Conclusions

This study shows that LSG with either bogie sizes, results in significant weight loss and resolution of co-morbidities. Intra-operative and post-operative parameters and complications after LSG were comparable in both groups. When stratifying outcomes by bougie size, results suggest that using a bougie size of 36 Fr when compared with 42 Fr does not result in any difference in weight loss in the short term with equivalent resolution of co-morbidities. Thus, it might not be wise to make a very snug sleeve over the bougie which has its own risks of stricture formation and causing leaks.