

ultrasonography presented steatosis in 97 (54.4%) cases of mild steatosis, in 161 (67.6%) moderate steatosis and in 268 (80.4%) of severe steatosis, $\chi^2 = 38.573$, $P < 0.001$.

Conclusion: It was observed an increase on ultrasonography sensibility as the degree of steatosis increase in this group of patients.

A5079

CORRELATION BETWEEN DYSLIPIDEMIA IMPROVEMENT AND CHANGES AT BODY FAT PERCENTAGE IN MORBIDLY OBESE PATIENTS SUBJECTED TO GASTRIC BYPASS

Alexandre Padoin, MD PhD¹; Felipe Laranjeira²; Luiza Lubianca, MD²; Rafael Ramos, MD³; Letícia Alves, MD MsC¹; Cláudio Mottin, MD PhD¹; ¹Faculdade de Medicina e Serviço de Cirurgia Bariátrica do Hospital São Lucas da Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, RS, Brazil; ²Faculdade de Medicina da Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, Rio Grande do Sul, Brazil; ³Serviço de Cirurgia Bariátrica do Hospital São Lucas da Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, Rio Grande do Sul, Brazil

Background: Body Mass Index although it's practicality have limitations. The aim of this study is evaluate the correlation between dyslipidemia improvement and body fat percentage changes.

Methods: We conducted an observational, retrospective cohort study of patients subjected to gastric bypass. We selected patients who underwent bioimpedance analysis and laboratory tests before surgery at 3, 6 and 12 months postoperatively.

Results: We studied 228 patients with a mean age of 37.4 ± 11.7 years old. Most patients were female (76.3%). Initially, 143 patients (66.2%) showed criteria for dyslipidemia, and 6 months after surgery, this number fell to 83 patients (50.6%) and continued falling over time to only 45 patients (28.5%) 12 months after surgery. In relating different variables with the decrease in percent body fat at 12 months, a significant association was seen with weight loss ($r=0.258$; $p=0.009$), BMI ($r=0.272$; $p=0.005$) and waist circumference ($r=0.357$, $p < 0.001$). However, the only biochemical parameter showing a significant association was HDL-C level ($r=-0.267$; $p=0.009$). Patients with the greatest decrease in body fat percentage were those with the largest decrease in weight, BMI and waist circumference and highest increase in HDL-C level.

Conclusion: This study demonstrated the association of decrease in percent body fat with increase in HDL-C, regardless of sex and age. The same association was also observed when using the parameters BMI, weight loss and waist circumference.

A5080

ABC STUDY: RESULTS OF THE FIRST US RANDOMIZED TRIAL OF BARIATRIC SURGERY FOR TREATMENT OF OBSTRUCTIVE SLEEP APNEA

Ali Tavakkoli, MD; Wei Wang, PhD; Robert Andrews; Sanjay Patel, MD; Dept of Surgery, Brigham and Women's Hospital, Boston, MA, USA

ABC Study cohort

	LAGB	CPAP	P value
Pre-surgery			
Age	51.3 ± 8.9	48.4 ± 9.4	NS
Male %	47%	68%	NS
BMI	39.1 ± 2.8	38.9 ± 3.1	NS
Initial AHI	49.7 ± 24.8	48.9 ± 26.7	NS
Initial ESS score	8.9 ± 2.6	11.4 ± 5.1	NS
Post-surgery			
Reduction in BMI at 9-months	5.2 ± 2.6	0.7 ± 2.6	P<0.05
Improvement at AHI at 9-months	-20.4 ± 26.0	-6.6 ± 25.3	P<0.05
Improvement in effective AHI at 9-months	-20.4 ± 26.0	-26.9 ± 31.2	NS
Improvement in ESS score	-2.2 ± 5.3	-3.4 ± 4.6	NS

Background: Obesity is the most common risk factor for obstructive sleep apnea (OSA) and current treatment with continuous positive airway pressure (CPAP) is often poorly tolerated. Bariatric surgery has been shown to improve OSA severity but these studies have primarily occurred in patients seeking weight loss surgery who are incidentally found to have OSA. We initiated an NIH-sponsored randomized trial of CPAP versus bariatric surgery as initial therapy in patients presenting to a sleep disorders clinic with symptomatic severe OSA (NCT01187771).

Methods: Adult patients with severe OSA and body mass index (BMI) of 35-45 kg/m² were recruited from two academically affiliated groups of sleep centers and randomized to either CPAP therapy or laparoscopic gastric banding surgery (LAGB). Follow-up evaluations to assess weight, OSA severity and OSA symptoms were performed at 9 months and 18 months following randomization by blinded observers.

Results: Out of 481 patients meeting eligibility criteria, 97 (20%) attended an informational meeting and 53 enrolled in the study with 49 being randomized (Table 1). There were no major surgical complications. Incidences of adverse events between the 2 treatment groups were similar. LAGB patients had a greater degree of weight loss and reduction in apnea hypopnea index (AHI), although the improvement in effective AHI (AHI accounting for CPAP use) and Epworth Sleepiness Scale (ESS) were similar. Satisfaction with treatment assignment was similar between the 2 groups. The differences in outcomes were persistent at the 18-month evaluation time point.

Conclusion: LAGB is a viable alternative to CPAP at reducing AHI and improving OSA symptoms. Patient satisfaction and incidence of adverse events is similar between LAGB and CPAP. Further studies randomizing patients to more invasive surgeries with greater weight loss are needed and can be justified.

A5081

IMPACT OF LAPAROSCOPIC ROUX-EN-Y GASTRIC BYPASS VERSUS SLEEVE GASTRECTOMY ON POSTOPERATIVE LIPID VALUES

Andrew Van Osdol, MD¹; Andrew Borgert, PhD¹; Kara Kallies, MS¹; Shanu Kothari, MD, FACS²; Brandon Grover, DO²; ¹Gundersen Medical Foundation, La Crosse, WI, USA; ²Gundersen Health System, La Crosse, WI, USA

Background: Bariatric surgery has been shown to significantly improve many obesity-related comorbidities, including dyslipidemia. Previous research in the early postoperative period has demonstrated inconsistent results in lipid values after laparoscopic