

anestesiologistas pediátricos do HCPA. 23,1% afirmaram que é oferecido líquido claro para os pacientes que estão há mais tempo do que o necessário em jejum. Ocorreram interpretações do tipo de alimento em desacordo com o guideline da ASA em 22,45% das respostas. Conforme o questionário espondido por dois residentes da Cirurgia Pediátrica, mesmo tendo conhecimento da permissão de líquidos claros até 2 horas antes do procedimento, esta orientação não é citada. Considerando que a abreviação do tempo de jejum pré-operatório não apenas é segura, como também traz benefícios ao perioperatório, esta deve ser uma das prioridades na estratégia de cuidados. A abordagem da família, além da uniformidade da conduta da equipe anestésica e cirúrgica na orientação do jejum, pode ser uma solução para obtermos melhores resultados.

eP2040

Metabolic effects of physical activity prior to and following bariatric surgery in severely obese subjects without diabetes: a cohort study

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Background: Even in individuals with severe obesity, physical activity (PA) reduces the risk of cardiometabolic diseases. Increasing PA is recommended prior to bariatric surgery (BS) but is performed with poor success. Objectives: To evaluate the PA of severely obese subjects without diabetes and to elucidate the benefits of PA practice prior to and following laparoscopic bariatric surgery (LBS). Methods: A prospective cohort study was conducted in 91 obese (grade II and III) subjects without diabetes who were submitted to LBS, Roux-en-Y gastric bypass (RYGB), or sleeve gastrectomy (SG) using a short version of the International Physical Activity Questionnaire prior to and 6 and 15 months post-LBS. According to the performance, or not, of ≥ 150 min/week of PA, the patients were classified into active and inactive prior to and 15 months post-LBS. Results: PA increased significantly 6 and 15 months post-LBS as compared with that preoperatively ($p < 0.001$); however, there was no difference between the two evaluated postoperative times ($p = 0.856$). Being active prior to LBS was associated with a greater loss of waist circumference after 15 months as compared with being inactive (27.0% versus 24.2%; $p = 0.027$), with a greater loss in subjects submitted to RYGB than to SG (26.8% versus 24.1%; $p = 0.024$). There was also an association between being active prior to surgery and a higher high-density lipoprotein cholesterol (HDL-C) level (18.2% versus 10.9%; $p = 0.035$), but there was no difference between RYGB and SG (15.8% versus 12.4%; $p = 0.277$). Being active 15 months post-LBS was not associated with any of the evaluated parameters. Conclusion: PA increased after LBS. The practice of ≥ 150 min/week of PA prior to LBS resulted in a greater loss of waist circumference and a greater increase in HDL-C levels, with probable metabolic and cardiovascular repercussions.

eP2042

Effect of bariatric surgery on high-density lipoprotein (HDL) cholesterol in non-diabetic patients with severe obesity

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Background: One of the key risk factors used by clinicians to assess cardiovascular risk (CVR) is the serum level of high-density lipoprotein cholesterol (HDL-C). Physical activity (PA), as well as certain drugs and interventions, is known to decrease non-HDL cholesterol (non-HDL-C), which could lead to an increase in serum HDL-C. Higher BMI increases the risk for hypertriglyceridemia, high LDL cholesterol (LDL-C) and low HDL-C. In addition, bariatric surgery (BS) has been shown to decrease LDL-C, triglycerides (TG) and non-HDL-C levels and increase HDL-C. Objectives: This study evaluated changes in serum HDL-C induced by laparoscopic bariatric surgery (LBS) in non-diabetic obese subjects with low (L-HDL-C) or normal (N-HDL-C) levels of HDL-C. We assessed whether increased HDL-C is associated with weight loss, serum non-HDL-C, serum TG and PA before LBS and 6 and 15 months after LBS. Methods: In this prospective cohort study, 76 subjects undergoing LBS (45 by Roux-en-Y gastric bypass and 31 by sleeve gastrectomy) were evaluated for the % Excess Weight Loss (%EWL), serum levels of HDL-C, non-HDL-C, glucose, glycosylated haemoglobin and TG, and the degree, time and energy expenditure related to PA. The short version of the International Physical Activity Questionnaire was used to assess PA. Results: Levels of HDL-C significantly increased 15 months after LBS ($p < 0.001$) in subjects with low ($p < 0.001$) or normal ($p = 0.027$) values at baseline. A similar %EWL, decrease in non-HDL-C, glucose and TG levels and increase in energy expenditure related to PA were observed in both groups (L-HDL-C and N-HDL-C) at 6 and 15 months after LBS. In subjects with increased HDL-C 15 months after LBS, there was an association between this increase and the %EWL ($p = 0.019$), but there was no association with the change in PA. Conclusion: Irrespective of PA after LBS, subjects with low and normal HDL-C levels at baseline showed an increase in HDL-C after LBS, and this increase was associated with %EWL induced by LBS.

eP2043

Peripheral polyneuropathy after bariatric surgery: independent association with high-density lipoprotein (HDL) cholesterol in a cohort study

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Background: The most common neurological complication described after bariatric surgery (BS) is peripheral polyneuropathy (PPN). However, there is poor evidence about the impact of BS on the incidence and progression PPN. Objectives: To evaluate the incidence and progression of PPN in non-diabetic severe obese subjects after laparoscopic bariatric surgery (LBS) and to seek for the presence of risk factors. Methods: In this prospective cohort study, 322 subjects undergoing LBS were evaluated for PPN by the Michigan Neuropathy Screening Instrument (MNSI) before and after 6 months of LBS and divided according to presence (+) or absence (-) of PPN at baseline. Known causes of PPN were excluded. Results: The prevalence of pre-LBS PPN was 21.4% and decreased to 8.7% post-LBS. When we looked to the two groups, from baseline to 6 months, for PPN (+) group ($n = 69$) the incidence of post-LBS PPN was 20.3% ($n = 14$) and for the PPN (-) group ($n = 253$) it was 5.5% ($n = 14$). In the PPN (-) group that incidence was independently associated with low high-density lipoprotein cholesterol (HDL-C) levels ($p = 0.001$) and the PPN risk increased from 7.4 to 8.6% at each 1 mg/dL decrease in HDL-C. Conclusion: The prevalence of PPN decreased after 6 months of LBS, but new cases of post-LBS

PPN appeared and they were independently associated with low HDL-C.

eP2061

Níveis séricos de vitamina D derivação gástrica em Y de roux e gastrectomia vertical

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Introdução Hipovitaminose D é comumente encontrada em indivíduos obesos e tardiamente nos que se submeterem à cirurgia bariátrica, favorecendo a ocorrência de osteoporose. No pós-operatório imediato, é relatado tanto o aumento quanto queda da vitamina D sérica. O objetivo deste trabalho é avaliar os níveis séricos de 25(OH)D após a cirurgia bariátrica, e buscar associação com perda ponderal, atividade física, consumo alimentar, e comparar resultados obtidos nos procedimentos de derivação gástrica em Y de Roux (RYGB, do inglês Roux en Y Gastric Bypass), e gastrectomia vertical (SG, do inglês Sleeve Gastrectomy). Metodologia Com delineamento longitudinal retrospectivo, foram avaliados os níveis séricos de 25(OH)D, perfil glicêmico, lipídico, atividade física e consumo alimentar de fontes de vitamina D no período pré e pós-operatório de 195 obesos submetidos ao RYGB (104) ou SG (91). As características antropométricas e laboratoriais dos participantes foram descritas por mediana e intervalo interquartil. As características antropométricas e laboratoriais dos participantes submetidos pré e pós-cirurgia foram comparadas através do teste de Wilcoxon e os dois tipos cirúrgicos foram comparados através do teste de Mann-Whitney. Os dados de consumo alimentar de vitamina D, obtido através da análise do recordatório alimentar, prática de atividade física, através do Questionário Internacional de Atividade Física (IPAQ) ou caminhadas e classificação dos níveis de vitamina D entre os dois tipos cirúrgicos foram comparados através do teste de correção de continuidade de Yates e a comparação desses dados entre os pacientes considerados com níveis adequados de vitamina D foi realizada utilizando teste exato de Fisher ou correção de continuidade de Yates. Resultados Os níveis séricos de 25(OH)D aumentaram após a cirurgia bariátrica nos dois tipos cirúrgicos, sem diferença estatística entre eles ($p= 0.983$). No grupo RYGB o nível de vitamina D aumentou 19.6%, passando de 13,5 (19,9; 29,0) ng/ml a 18,1 (21,7; 35,0) ng/ml. Já no SG 20.2%, passando de 23,3 (19,0; 31,6) ng/ml a 28,0 (21,6; 34,8) ng/ml. Em ambos os grupos, o aumento não foi suficiente para que níveis séricos adequados de vitamina D (>30 ng/ml) fossem atingidos. Conclusão Os níveis de vitamina D aumentam após a cirurgia bariátrica, porém não o suficiente para alcançar níveis adequados de vitamina.

eP2075

Induction of selective liver hypothermia prevents significant ischemia/reperfusion injuries in rats after 24 hours

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Background and Aims: induction of liver hypothermia is a surgical tool able to prevent warm ischemic injuries. Protective mechanisms involved are not completely understood, but the protection to liver microcirculation and reduction of inflammation are potential candidates to explain the attenuation of the reperfusion injuries. The study aims to investigate the effects of induction of selective liver hypothermia, the role of endothelial and inducible oxide synthases (eNOS and iNOS), inflammatory cytokines and histopathological injuries in a rodent model. Methods: 19 male Wistar rats were subjected to 90 minutes partial 70% liver ischemia either in normothermia (Group N) or selective 26°C hypothermia (Group H). 24-hours after reperfusion, livers were sampled and sent to analyses. Anatomopathological sections were scored for sinusoidal congestion, ballooning, hepatocellular necrosis and neutrophilic infiltrates. Results: At the end of the experiment, liver tissue expressions of TNF- α , IL-1 β , iNOS and TNF- α /IL-10 ratio were significantly reduced in the H group compared to N group ($P<0.05$), whereas IL-10 and eNOS were significantly increased ($P<0.05$). IL-6 expression was similar between the groups. Histopathological injury scores revealed significant decrease in H group ($P<0.05$). Conclusions: Selective liver hypothermia prevents I/R injury by limiting the release of inflammatory cytokines, preservation of microcirculation, and attenuation of the inflammatory response. The suppression of the inflammatory cascade by selective liver hypothermia enabled maintenance of the liver architecture.

eP2096

National multicentric derivation and validation of the sampe model – a mortality risk stratification model within 30 days postoperatively

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Introduction Surgical care is essential for the proper management of various clinical conditions. It is known that the interaction between surgical-anesthetic interventions and the patients' clinical condition can lead to unfavorable outcomes, especially in major procedures. In order to identify patients at highest risk of complications and thus adopt strategies that improve the care provided, several models of surgical risk stratification have been developed. Ideally, these should be simple, reproducible and accurate. Unfortunately, none of the best-known risk stratification instruments had their validity tested for the Brazilian population. In view of this, a preoperative risk assessment model - SAMPE Model - was developed, incorporating 4 variables that were easily identified in the preoperative period (age, ASA classification, size and nature of surgery), having in-hospital mortality in up to 30 days as a primary outcome. This was developed by the retrospective analysis of data from 13,524 surgical patients of the Hospital de Clínicas de Porto Alegre, showing high prediction of death accuracy (area under the ROC curve = 0.913). The model was later validated in another sample of the same hospital ($n = 7,253$), confirming its accuracy (C statistic of the validation sample was 0.922). Objective: To build and validate a national-based model of postoperative death probability within 30 days with based on the SAMPE Preoperative Risk Model. To develop an app for smartphones that allows preoperative risk stratification by the new SAMPE Model. Materials and Methods: Multicentric retrospective cohort study with patients operated in five hospitals in Brazil. The variables age, ASA score, surgical degree (major or non-major) and nature (elective or urgent) will be evaluated for the SAMPE Model development. The primary outcome will be mortality in 30 days. Expected Results: We believe that the new SAMPE model will present discriminative capacity similar to that of other classically used scores validated in the prediction of in-hospital death within 30 days, with the differential of