predictor of length of stay, even when corrected for age, gender and BMI and other confounding factors.

References

[1] Günther et al 2008 J Hand Surg AM; 33(4).

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PP353

MALNUTRITION RISK VARIES ACCORDING TO NUTRITION INTERVENTION IN CARE HOMES

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Rationale: There is little information about how the prevalence of malnutrition in care homes varies according to the type of nutritional support provided. This study aimed to examine the extent to which malnutrition in residents receiving oral nutritional supplements (ONS) and enteral tube feeding through a percutaneous endoscopic gastrostomy (PEG) differs from the general care home population, and whether dietetic input is provided.

Methods: 1322 residents [mean age 86.7 y (SD 8.7), mean BMI 23.0 kg/m^2 (SD 5.1)] from 51 care homes (24 nursing, 19 residential, 8 dual registered) participated. Malnutrition was assessed using 'MUST' ('Malnutrition Universal Screening Tool') (1) and related to the use of ONS (in the 4 weeks prior to the survey), PEG feeding, as well as the provision of dietetic input.

Results: 8% of the care home population received ONS and 2% PEG feeding. Those receiving ONS resided predominantly in nursing homes (61%), and to a lesser extent in residential (10%) and dual registered homes (29%). All residents with a PEG resided in nursing homes. Overall 37% of residents were at risk of malnutrition (13% medium risk, 24% high risk) but this varied according to the type of nutritional support provided. Dietetic input was provided to 0.3% of the population. Results according to ONS and PEG are shown in the table.

	ONS	PEG	Other
%malnutrition[†] (medium+high)	85 (14 + 71)	23 (8 + 15)	34 (14 + 20)
% receiving dietetic input	2	8	0

[†] p < 0.0001 (Chi^2).

Conclusion: Despite the particularly high prevalence of malnutrition in care home residents who do and do not receive nutritional support, dietetic input in this locality is extremely limited.

References

[1] Elia (2003) The 'MUST' report, BAPEN, Redditch.

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PP354

THE DIET QUALITY OF PRIVATE AESTHETICS PATIENTS NEEDS IMPROVEMENT AND IT IS NOT ASSOCIATED TO INDICATORS OF NUTRITIONAL STATUS

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Rationale: The interest in body image and the demand for aesthetic treatments are increasing, as the concern with the diet quality due to the relationship between dietary pattern and nutritional status. This study was aimed to assess the diet quality of patients from private aesthetics clinics and the associations between diet quality and indicators of nutritional status.

Methods: A cross-sectional study with 119 patients from three private aesthetics clinics in Porto Alegre (Brazil). Weight, height and waist circumference (WC) were measured. Body mass index (BMI) was calculated. Food intake was assessed by one 24-h recall. Data were converted according to the energy content and groups of the Brazilian Food Pyramid. Total fat, saturated fat, cholesterol and diet variety were assessed. The Healthy Eating Index to the Brazilian population (IASad) score was calculated and diet classified as good (>100 points), needs improvement (from 71 to 100) and poor (<71 points).

Results: From 119 patients, 90.4% were female. Mean age was 39.1 years old. BMI was 26.2 kg/m^2 and WC was 80.5±11.3 cm (women) and 99.7±13.7 cm (men). The IASad was 84.6±14.4 points. Diet was classified as poor quality in 15% of patients, good quality in 11.7% and needs improvement in 73.1%. The consumption of all foods groups did not reach the recommendation (P < 0.001). Total fat consumption was not different of the recommendation (P = 0.26). According to WC mean values, IASad was not different between patients with WC higher than the mean and patients with WC bellow the mean (85.7±13.7 vs. 81.7±16.1, P = 0.186). The IASad was not different for patients with BMI > 26 kg/m^2 as compared to those with BMI < 26 kg/m^2 (86.0±11.7 vs. 83.4±16.3, P = 0.32).

Conclusion: Most of private aesthetics clinics patients needs to improve the diet quality. The IASad was not associated to anthropometric parameters.

Disclosure of Interest: None declared

PP355

GLYCEMIC INDEX AND GLYCEMID LOAD OF PATIENTS FROM AESTHETICS CLINICS: AN ASSOCIATION WITH ANTHROPOMETRIC PARAMETERS

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Rationale: Body image and ideal weight are a big demand for aesthetic treatments. Also, the concern with diet is growing up, particularly with the dietary

carbohydrates due to the influence in the glycemic and insulinemic responses. We evaluate the relationship between glycemic index and glycemic load of daily diet and the nutritional status of patients from in private aesthetics clinics.

Methods: A cross-sectional study with 119 patients from three private aesthetics clinics in Porto Alegre (Brazil). Weight, height and waist circumference (WC) were measured. Body mass index (BMI) was calculated. Food intake was assessed by one 24-h recall. The quality of carbohydrates was evaluated through the glycemic index (GI) and glycemic load (GL), both estimated as proposed by FAO/WHO.

Results: Patients included in this study (90.4% female) had 39.2 ± 13.5 years old, BMI of $26.2 \pm 5.1 \, kg/m^2$, and WC in women of $80.5 \pm 11.3 \, cm$ and $99.7 \pm 13.7 \, cm$ in men. Daily diet GI was $54.4 \pm 7.5\%$ and GL was $89.9 \pm 38.7 \, g$, classified as intermediate. Patients were grouped according to WC mean values and GI and GL were compared between the two groups. Patients with WC greater than the mean had higher daily diet GL than patients with WC below the mean (106.9 ± 41.3 vs. $76.3 \pm 32.8 \, g$, $P < 0.001$). A higher GL was also observed in patients with BMI $> 26 \, kg/m^2$ as compared to those with BMI $< 26 \, kg/m^2$ (96.5 ± 42.3 vs. 80.6 ± 31.7, $P = 0.02$). According to the linear regression analyses, adjusted for daily diet energy and for gender, the GL explained 26.2% of the variability in WC values ($P < 0.001$).

Conclusion: The daily diet of patients presented an intermediate GL. Those with raised WC and BMI had higher GL than patients with adequate WC and BMI. Daily diet GI was not associated with anthropometric parameters.

Disclosure of Interest: None declared

PP356
NUTRITIONAL DIFFERENCES BETWEEN THE PATIENT SUB-GROUPS IN NEUROSURGERY

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Rationale: Neurosurgery is mainly divided into two subgroups as cranial and spinal surgery. Each group have very unique and different patient characteristics. This study was designed for understanding the nutritional risk differences between the patients with cranial and spinal disorders.

Methods: Neurosurgical patients who were hospitalized for cranial or spinal surgery between October 2009 and January 2010 were included. Evaluation of the patients nutritional status was made according to the NRS-2002 system. Patients were considered malnourished when NRS-2002 score was $\geqslant 3$. The patients were divided into two groups according to the operation localization. The number of malnourished patients between spinal and cranial groups were statistically compared.

Results: Number of patients in this study was 400 [183 males (45.8%), 217 females (54.3%)]. Number of patients in Spinal group was 158 (39.5%), in cranial group was 242 (60.5%). Mean age of patients was 51.86 (18–90) years. 358 (89.5%) patients had 2 or lower NRS-2002 scores at the beginning. On the other hand, 42 patients (10.5%) had

3 or higher NRS-2002 scores and they were considered as malnourished.

Mean age of spinal group was 53.54 and cranial group was 50.77. There was no statistically difference between subgroups according to the mean ages (t-test, $p = 0.76$). Cranial surgery group had 37 and spinal surgery had 5 malnourished patients. This differences between the groups is also statistically significant (chi-square, $p < 0.001$).

Conclusion: Neurosurgery clinics mainly serve the patients with spinal disorders and patients with cranial disorders. Most of the spinal disorders are reason of the degenerative processes and they are usually elderly patients. On the other hand, cranial disorders mainly include the malignancies and traumatic events. This study shows that, the patients with cranial disorders under higher nutritional risk than the other patients in neurosurgical clinics.

Disclosure of Interest: None declared

PP357
PREDICTION EQUATIONS ARE INACCURATE AND MAY RESULT IN POORER CLINICAL OUTCOMES IN PATIENTS RECEIVING ARTIFICIAL NUTRITION

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Rationale: Nutritional requirements are most accurately assessed by resting metabolic rate (RMR) as measured using indirect calorimetry (IC). However, it is common practice to use prediction equations (Schofield's) as they are more practical. This study aimed to assess the accuracy of prediction equations when compared to IC and to examine whether any disparity was associated with worse clinical outcomes.

Methods: This was a prospective observational study of consecutive patients receiving nutritional support between April 2008 and February 2010. Patients continued to receive their nutritional requirements as predicted by Schofield equations. Their resting metabolic rates (RMR) were measured using IC. Episodes of systemic inflammatory response syndrome (SIRS), septic morbidity and mortality were recorded.

Results: There were 47 patients (20 females) who received enteral nutrition and 33 patients (9 females) who received parenteral nutrition. The Schofield equations significantly overestimated nutritional requirements when compared to the RMR (by IC) in patients receiving enteral nutrition [median 1211 kcal vs. 1384 kcal ($P = 0.002$)]. However, Schofield equations underestimated the requirements of patients receiving parenteral nutrition [median 1712 kcal vs 1552 kcal ($P = 0.002$)]. Episodes of SIRS and septic morbidity were significantly higher in those patients who were overfed because of over-estimation of their nutritional requirements by Schofield equations ($P = 0.046$ and $P = 0.007$ respectively). There was no difference in mortality.

Conclusion: Schofield equations are inaccurate in predicting energy requirements. Feeding patients according to these equations may result in poorer clinical outcomes.