

delirious group (n = 130). 7 patients were excluded because of R2 resection. Short-term outcomes and risk factors for POD were analyzed.

**Results:** POD was diagnosed in 12.2 % of elderly patients with gastric cancer. Univariate analysis showed that multiple comorbidity, a history of cerebrovascular disease and preoperative albumin were significantly associated with POD. Multivariate logistic regression analysis identified a history of cerebrovascular disease and preoperative albumin < 3.5 g/dl as independent risk factors for POD. Postoperative delirium was not associated with postoperative complications or postoperative hospital stay.

**Conclusion:** The incidence of postoperative delirium was 12.2% in gastric cancer surgery for elderly patients age 80 years and older. A history of cerebrovascular disease and preoperative albumin < 3.5 g/dl were risk factors for postoperative delirium after gastrectomy in elderly patients.

**Disclosure of Interest:** .

#### MON-LB437

##### CAREGIVER'S BURDEN, NUTRITIONAL AND FUNCTIONAL STATUS IN SURVIVAL OF COMMUNITY-DWELLING ALZHEIMER'S DISEASE PATIENTS

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**Rationale:** Dementia is one of the leading causes of mortality in older adults. A decline of nutritional and functional status is very common among Alzheimer's Disease (AD) patients. It is unclear whether caregiver's burden, nutritional and functional status are associated with mortality in AD patients. The aim of this study was to quantify the association between baseline caregivers' burden, nutritional and functional status, and time to death in community-dwelling AD patients.

**Methods:** A prospective observational study was conducted in 79 community-dwelling mild AD patients (32 men; age: 78.2±6.6 years) between 2012 and 2017. Nutrition status was evaluated using MNA score, body mass index (BMI) and phase angle (PhA), and functional status using handgrip strength (HGS) and gait speed (GS). Low values of the PhA and HGS were defined below the 50th percentile of the sample. Low GS was defined as <0.4ms<sup>-1</sup>. Caregivers' burden disease was assessed by Zarit burden scale. Kaplan-Meier and adjusted Cox proportional hazard ratios (HR) analyses were conducted. The follow-up period was 60 months, and the survival time was calculated as the difference between the day of death and the initial date of study.

**Results:** Twenty-two AD patients (27.8%) died during the follow-up. According MNA, 87% patients were at undernutrition risk and 13% were undernourished. The probability of non-survival was for undernutrition: HR: 5.69 (95% CI: 2.21-14.61); underweight: HR: 3.24 (95% CI: 1.18-8.82); low PhA: HR: 2.35 (95% CI: 0.97-5.66); low HGS: HR: 3.11 (95% CI: 1.18-8.17); low GS: HR: 4.73, (95% CI: 1.68-13.27) and severe caregivers overload: HR: 3.39 (95% CI: 1.27-9.01).

**Conclusion:** In community-dwelling AD patients, undernutrition, underweight, low PhA, HGS and GS as well high caregiver's burden, were associated with higher probability of non-survival over time.

**Disclosure of Interest:** None declared.

#### MON-LB438

##### EXPERIENCE OF USING A SEMI-ELEMENTAL FORMULA FOR HOME ENTERAL NUTRITION IN CHILDREN: A FRENCH MULTICENTER STUDY

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**Rationale:** The use of semi-elemental diets concerns a small number of children on enteral nutrition whose characteristics have never been reported. Our aim was to describe a cohort of patients on home enteral nutrition with a semi-elemental formula (Peptamen Junior®), including the tolerance and success rate of this product.

**Methods:** We performed a retrospective multicenter survey on a cohort of patients receiving this semi-elemental diet at home between 01/01/2010 and 02/12/2015 in 14 tertiary pediatric French centers. We recorded at baseline, 3, 6 and 12 months, and then every year the anthropometric characteristics of the patients, indications and modalities of administration of the diet, as well as the tolerance and adverse events. The success rate was a priori defined as the evolution of the body mass index (BMI) during the first 6 months (maintained above -2 standard deviations (SD) or increased by 1 SD if previously below -2 SD).

**Results:** We recruited 136 patients aged 9.8 ± 4.4 years at inclusion. The follow-up duration was 0.1 to 143.8 months (median 9.8 months). The mean BMI z-score of the patients was -1.0 ± 1.8. The main underlying diseases were digestive (35.3%), neurological (33.1%), and haematological conditions (19.9%), often with multiple pathologies. The indications for a semi-elemental formula were failure of another diet in 70 patients (51.9%), severe malnutrition in 19 (14.1%), cystic fibrosis in 11 (8.1%) and switch from parenteral nutrition in 11 (8.1%). This diet covered on average 75.6 ± 29.2% of the daily caloric intake of the patients. Side effects were observed in 39.2% of the patients, and required medical attention in 8.2%. The success rate was 88.3% [79-95%].

**Conclusion:** This semi-elemental diet is well tolerated and efficient in the setting of home enteral nutrition in children with complex diseases featuring malabsorption and/or after failure of a polymeric diet.

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#### MON-LB439

##### PHYSICOCHEMICAL COMPATIBILITY OF DEXMETOMIDINE WITH TOTAL PARENTERAL NUTRITION

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**Rationale:** Dexmedetomidine (DEX) is an  $\alpha_2$ -agonist used as an intravenous sedative agent in the intensive care setting. In certain cases, simultaneous administration of DEX and total parenteral nutrition (TPN) may be required. The aim of this study was to evaluate the physicochemical compatibility of DEX with TPN during simulated Y-site administration.

**Methods:** Six different solutions were compounded: three standard TPN (1585 mL) and three DEX solutions (1000 µg in 250 mL NS). The tested infusion rate for TPN was 66 mL/h, simulating a 24-hour infusion. As for DEX, we considered the infusion rate recommendations included in the data sheet (initial infusion rate of 0.7 µg/kg/h; maximum rate: 1.4 µg/kg/h). Taking this into account, and considering extreme weights (55 and 95 kg), we tested two DEX infusion rates (10 mL/h and 36 mL/h). The samples obtained from the simulated Y-site administration of DEX and TPN were examined visually against light. Quantification of DEX concentration was carried out by UPLC-HRMS. Mean lipid droplet size distribution was determined by dynamic light scattering. pH was analysed with a pH meter.