used to direct a systematic literature search. Published evidence was appraised using the GRADE system. Where the literature search identified sufficient evidence, the GDG made a guideline recommendation. Where there was insufficient evidence, the GDG drafted recommendations based on their expert opinion and reviewed these using a formal Delphi consensus process. This was a joint society (BSPED/CCLG) multidisciplinary national endeavour done to NICE methodology and overseen by RCPCH.

Results The literature search identified 568 articles covering the period Jan 1990 –March 2017. The most commonly reported causes of iTPS and iCDI in children are Langerhans Cell Histiocytosis (LCH), Germ Cell Tumours (GCT) and craniopharyngioma (CP). The average prevalence of LCH, GCT and CP in 11 case series (including 741 patients) is 16%, 13% and 12%, respectively. Overall, congenital defects are responsible for 19% of the iTPS/iCDI cases, whilst infectious diseases (2%), trauma (1%) and inflammatory/autoimmune conditions (1%) rarely occur in children. In 29% of the cases no aetiology is identified. Causes of pituitary stalk lesions in adults, metastatic tumours and neurosarcoidosis, do not form part of the differential diagnosis in children. What constitutes a TPS is not consistently defined across studies. High quality evidence was lacking for the majority of the clinical questions and two rounds of Delphi consensus were undertaken. A decision-making flowchart has been developed and will accompany the guideline.

Conclusion The likely aetiology of iTPS and iCDI in children differs from that in adults and justifies the development of age appropriate decision making management guidelines to inform best practice nationally. This will form the basis for future audits of practice and outcomes and is intended to improve the quality of care of children and young people with iTPS and iCDI.
childhood or young adult cancer. Of these, 4.36% had contacts recorded on the Mental Health and Learning Disabilities Data Set. Female survivors (5.36%) were more likely to have mental health contacts than males (4.51%), although this was not statistically significant (p>0.05). Survivors diagnosed between the ages of 15 and 29 (6.24%) were significantly more likely to have mental health contacts than those diagnosed at 14 or younger (3.78%; p<0.001). Lymphoma survivors (5.79%) were more likely to have mental health contacts than leukaemia survivors (3.74%; p=0.006) or non-CNS solid tumour survivors (4.39%, p=0.001) but not CNS tumour survivors (4.97%; p>0.05).

Discussion The increased number and proportion of patients diagnosed in this series 10/18 (56%) went on to have a recurrence and of those identified in this case series. Further work will investigate the risks of mental health contact according to ethnic group, treatment modality and socio-economic status and seek additional mental health consultation data from linked primary care records.

Abstracts

G359(P) CHARACTERISING THE DISEASE PRESENTATIONS OF LCH OVER 10 YR AT A UK PTC

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Objectives To characterise the disease presentations of Langerhans Cell Histiocytosis in a UK Principal treatment centre (PTC) over the past 10 years.

Methods Our PTC serves a population of 3.6 million sharing care with 11 regional shared care centres. A retrospective case review was performed for all patients treated for LCH over the last 10 years. Data were collected on demographics, disease location, treatment modality, intervals of remission free outcome and latest evaluation at follow up.

Results 1041 children have been treated for cancer over the past 10 years (1/1/2006–31/12/2016). 45 cases of LCH from children aged 2 mths to 16 years (median age of 2 years 6 mths) in our database accounting for 4% of our cases. There were 44% females and 58% males. 64% of cases presented with single-system disease at diagnosis and 36% with multi-system disease. 4 children were identified as having diabetes insipidus at diagnosis 2.5%.

33/45 (73%) had a biopsy performed consistent with LCH, 10 had no biopsy performed and 2 had a biopsy which was negative but were treated as per LCH due to typical clinical radiological correlation. 2 cases of neurodegenerative LCH were identified in this case series.

Conclusion Multi-system patients have a more challenging course and in our series 10/18 (56%) went on to have a recurrence and of these 2 patients have had 4 relapses and are still undergoing further therapy.

G360(P) A RANDOMISED CONTROLLED TRIAL OF READY TO USE THERAPEUTIC FOOD (RUTF) FOR MODERATE/SEVERE ACUTE MALNOURISHED INDIAN CHILDREN WITH CANCER

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Background Children with cancer are at increased risk of malnutrition. Early nutrition intervention helps to maintain weight, lean body mass, improved treatment tolerance and QOL. RUTF, with higher recovery rates in pilot studies has brought about a paradigm shift in the management of malnutrition. This pilot trial evaluated the effectiveness of RUTF in prevention of malignancy related weight loss, improvement of micronutrient status, treatment tolerance and QOL.

Methods 70 children (5–15 years) with hematolymphoid and solid tumours were enrolled post the appetite test. Randomization into 1:1 using a computerised table and stratification by type of malignancy. Nutritional status (weight, height, BMI, MUAC, TSA), biochemical analysis, DEXA scan, HRQOL, treatment tolerance evaluated at baseline, 6 weeks and 3 months into study and 6 months follow-up for anthropometry and treatment tolerance.

Results Seventy newly diagnosed MAM/SAM children with cancer with median age 9 years (range, 5–15), M:F 3:1 were randomised into RUTF (37) :control(33) arms. Median protein and calorie intake as well as weight gain at 6 weeks (2.6 kg vs. 2.2 kg) was higher in the RUTF arm compared to controls on standard dietary care. At 6 weeks there was significant reduction of MAM/SAM children ((16 vs. 23, p<0.05)) with increment of lean mass in the RUTF arm vs. controls. Vitamin B12 and folate deficiency (33%), vitamin D(63%), 56% and 96% had copper and zinc deficiency respectively, which improved in the RUTF arm. Children on RUTF experienced significant reduction in the episodes of febrile neutropenia (18.9% vs. 30.3%, p=0.06), protocol delays(2.7% vs 30.3%, p<0.05), grade 3/4 neutropenia (40.54% vs. 66.7%, p<0.05), thrombocytopenia(21.6% vs. 30.3%, p<0.05) and anaemia (18.9% vs. 36.36%, p>0.05) beyond 6 weeks. Mean HRQOL scores were better in the RUTF arm at baseline, 6 weeks and 3 months.

Conclusion RUTF is cost-effective in improving nutritional status resulting in higher weight and lean body mass which translates into improved treatment tolerance and QOL.