

**Conclusions** Children with SN, present a patient history with a higher incidence of gestational-perinatal problems, genetic disorders and congenital heart diseases, thus presenting LD, PD, a variety of behavioral and developmental disorders, with notable example the impaired hand dominance, mainly ambidexterity.

**P412 THE AGONY OF THE CHILD WITH COMPLEXITY: EXPLORING THE PSYCHOLOGICAL IMPACT ON PARENTS CARING FOR CHILDREN WITH COMPLEX HEALTHCARE NEEDS**

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10.1136/archdischild-2019-epa.758

**Aims** Medical advances and improved neonatal care have led to increased survival of children with complex healthcare needs. The aim of this literature review was to explore what is known about the psychological impact on parents of caring for children with complex healthcare needs across North America and Europe, and more specifically within Ireland.

**Methods** A comprehensive search of the literature published within the last ten years was performed using PubMed and PsychINFO databases. Ten papers, consisting of qualitative studies and meta-analyses, which varied in sample size and methodology, were selected for detailed review.

**Results** Recent publications emphasise that caring for a child with complex care needs has a significant negative impact on the psychological wellbeing of parents. Several qualitative studies have shown that caregivers of children with life-limiting illness are up to twice as likely to report higher levels of parenting stress and depressive symptoms than parents of healthy children. The literature suggests that women experience greater parenting stress in caring for severely ill children than men, with one study noting an increase in maternal sick leave for psychological distress. However, women were more likely to report being the predominant caregiver, which could account for this discrepancy. Social isolation was a recurring factor contributing to the perceived burden of stress experienced by caregivers. Similar themes were evident across North America and Europe publications. We noted a paucity of research in the Irish context.

**Conclusion** Further research is needed to evaluate the psychological impact of caring for a child with complex healthcare needs and to guide management and prevention of parental stress and psychological illness, particularly in Ireland. Additional studies are needed to determine if increased social support reduces psychological stress and to investigate the effects of parental stress on disease progression in children with complex healthcare needs.

**P413 THE USE OF CEREBROLYSIN IN PERVASIVE DEVELOPMENTAL DISORDERS**

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10.1136/archdischild-2019-epa.759

**Introduction** Pervasive developmental disorders (PDD) which has been increasingly called in the USA 'Autism spectrum

disorder' include five chronic disorders marked by early impairment in socialization, communication, and repetitive behavior. There is no known curative therapy for PDD which include autism, Asperger syndrome, and atypical autism.

**Objectives** Marked improvement or disappearance of autistic features in these disorders have not been reported with any therapy before. The aim of this paper is report a retrospective observational study describing the use of a new therapeutic approach for the treatment of (PDD).

**Methods** During the year 2018, Six with PDD particularly autism and Asperger syndrome observed at the pediatric psychiatry clinic at the Teaching Hospital of Baghdad Medical City were treated with a new therapeutic approach which includes injectable cerebrolysin as the main therapeutic component. The patients ages ranged from 3 to 8 years.

The new approach aimed at improving the cardinal feature of PDD which is the impairment of social interaction which is mostly manifested by poor responsiveness to their name and infrequent engagement with others manifested by poor eye contact and infrequently looking to faces.

Most patient also required neuroleptics to control hyperactivity and other abnormal behaviors. Trifluoperazine and prochlorperazine were used as necessary.

Some patients also received citicoline as an adjunctive therapy to improve speech development.

It is expected that improving social interaction will contribute to improving other features especially verbal communication and speech.

Courses of intramuscular cerebrolysin were given in individualized regimen depending on the age and severity of the illness and with aim of improving social interactions including response to name, looking at faces, and eye contact.

**Results** All the patients with autism and Asperger syndrome treated with this new approach showed improvement and marked lessening of the autistic features with some patients showed complete disappearance of the main autistic features. No patient developed any side effects.

Patients observed during the same year who didn't receive this treatment or were treated with other treatments such as omega-3 and risperdone didn't show any lessening effect in the autistic features. However, one patient treated with citicoline injection showed improvement in the autistic features.

**Conclusions** Further studies are vital to study this new therapeutic approach.

**P424 A RARE CASE OF HYPERMETHIONINAEMIC ENCEPHALOPATHY IN AN INFANT WITH CLASSICAL HOMOCYSTINURIA**

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10.1136/archdischild-2019-epa.760

**Introduction** Classical Homocystinuria is an autosomal recessive disorder caused by profound cystathionine  $\beta$ -synthase (CBS) deficiency. CBS deficiency is a disorder of metabolism of methionine leading to accumulation of homocysteine in both blood and urine. Clinical manifestations include lens dislocation, developmental delay, skeletal anomalies and thromboembolism. Treatment is lifelong and may include pyridoxine and specialised diet; medications such as betaine may also be considered as an adjunctive treatment. Betaine functions by