**Introduction** Inflammation of the intervertebral disc and vertebral bodies is uncommon in children. The diagnosis can be challenging due to non-specific signs and symptoms.

**Case Report** A 12 month-old previously healthy female child presented with pain in the right hip, refusal to walk, and fever (up to 38.6°C) for five days. There was no history of trauma. On admission, the infant was febrile and had a limping gait. The remainder of the physical examination was normal. She was hospitalized for further investigation. A complete blood count revealed

10880 white blood cells/µL (52% neutrophils, 34% lymphocytes, 2% eosinophils and 10% monocytes), a haemoglobin level of 10.2 g/dL, and a platelet count of 452000/µL. The erythrocyte sedimentation rate (ESR) was 73 mm/hour and the C-reactive protein was 2.74 mg/dL. Radiography of the lower limbs and pelvis was normal. The following day, the child was unable to sit. Magnetic resonance imaging (MRI) of the spine showed an abnormal signal in the vertebral bodies and intervertebral disc at L4-L5, with a high signal on the STIR image, compatible with spondylodiscitis. Bed rest and empirical treatment with intravenous ceftriaxone and flucloxacillin was started.

Diagnostic tests performed to detect an infectious cause were negative, including blood and stool cultures, Wright's and Widal's tests, a Mantoux test, an Interferon-Gamma Release Assays blood test, a Polymerase Chain Reaction test for Mycobacterium tuberculosis from gastric washings, staining for acid-fast bacilli, and cultures for mycobacteria.

One week later, the levels of inflammatory markers decreased and the child improved clinically. An additional MRI study performed in the second week showed a reduction in signal alterations. After four weeks, the child was sitting and walking again without difficulty or pain. The inflammatory markers returned to normal. Intravenous therapy was switched to oral treatment with cefuroxime and flucloxacillin for another four weeks.

At a follow-up visit, an MRI study showed complete resolution of spondylodiscitis. There were residual abnormalities of the disc space and L4/L5 vertebrae, with no functional significance. The child was asymptomatic and behaving normally.

**Conclusion** Suspicion of spondylodiscitis is important when a child presents with walking difficulties. The vascular nature of the intervertebral disc in children explains the predisposition to this rare condition. Magnetic resonance imaging of the spine is the gold standard for diagnosis. Early diagnosis is important to ensure a favourable outcome.

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**REGRESSION OF MILESTONES IN AN INFANT AS PRESENTING FEATURE OF MATERNAL PERNICIOUS ANAEMIA**

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**Background** Children presenting with regression of milestones is not uncommon in the paediatric population. One should be aware of wide range of differential diagnosis including neuro metabolic causes. In our case, methylmalonic aciduria as a part was metabolic screening was noted leading to diagnosis of vitamin B12 deficiency in the infant and pernicious anaemia in mother.

**Case Presentation** We report the case of a 6-month-old female patient presenting with a history of suspected seizures in the form of abnormal upper limb movements, staring episodes with background history of developmental delay and regression of milestones over last few months.

There were no infection concerns. Birth history was normal and she was exclusively breastfed. She was well until four months of age when she presented with what sounded like shuddering episodes but had a normal examination that time.

On examination, she was hypo-reflexic and had poor grasp. Her tone was normal. She did not have any neurocutaneous markers. Our initial impression was of afebrile seizure likely infantile spasms.

**Investigation** Blood investigation revealed macrocytic anaemia. Her renal, liver and thyroid function were normal. Serum ammonia and lactate were normal.

An EEG and MRI brain were normal. Although we could not get Serum Amino acids results due to sampling error, her urine organic acid analysis revealed excessive excretion of Methyl malonic acid prompting further evaluation. Her B12 levels were noted to be significantly low, i.e. <101 pg/ml (197-771) with normal folate levels. With a history of exclusive breastfeeding, her mother was also investigated and found to have anti-parietal cell antibodies confirming underlying pernicious anaemia.

Patient had good recovery with normalisation of urine organic acid profile after treatment with injectable hydroxocobalmin.

**Discussion** Developmental delay is a common presentation in paediatric setting. Choo et al mentions prevalence up-to 15% amongst preschool children. One should take through history and undertake comprehensive examination for narrowing down wide spectrum of differential diagnosis. Global developmental delay, regression of milestone, presence of abnormal neurological examination are some of the red alarm signs which mandates further evaluation including neuroimaging and baseline metabolic work up.

In our case, methylmalonic aciduria lead us to diagnosis of nutritional vitamin B12 deficiency reemphasising importance of metabolic work up in these clinical presentations. Some studies like Hoznik et el mentions methylmalonic aciduria as most sensitive marker for Vitamin B12 deficiency.

**Conclusion** Vitamin B12 deficiency should be considered as an important differential while evaluating infants with developmental delay.
evaluate this case thoroughly to come up with diagnosis of atlanto axial dislocation confirming Grisel syndrome.

**Case Summary** We present a case of a 2-year girl old who presented with history of fever, on and off neck stiffness and reduced oral intake for three days. She was given IM benzylpenicillin in the community considering possibility of meningitis.

There were similar two distinct episodes in past where she developed cough, fever and transient difficulty in moving her neck. Both times she recovered fully without any residual symptoms.

Her systemic review was unremarkable. She was normally fit & healthy with up to date immunizations.

On examination, she had head tilt to the right side with diffuse swelling in left mandibular region. There were no rashes. T.37.4°C. Other examination were unremarkable.

Apart from marginally elevated CRP her septic screen was normal. Her persistent symptoms despite intravenous antibiotics prompted CT scan of her neck showing rotatory subluxation of Atlantoaxial joint suggesting Griesel Syndrome while her MRI brain was reported as normal ruling out space occupying lesion.

A week later her serology confirmed the diagnosis of mumps despite of having previous immunization.

She was transferred to tertiary care hospital where a ASPEN neck collar was inserted under sedation with good recovery.

**Discussion** While approaching patients with acquired torticollis one should be mindful of wide range of differentials like simple trauma to potential space occupying lesion. Blankstein et el describes 61% cases of torticollis being non traumatic in this age group. Underlying pathology could be very diverse ranging from ADEM to Kawasaki disease.

In our case, as patient presented with fever and diffuse neck swelling, we considered only infective pathalogy initially. But with her persistent symptoms we expanded our differentials and investigated accordingly confirming Griesel syndrome secondary to Mumps. Park et el describes how pharyngovertebral vein act as an septic channel leading to atlanto axial hypere

Conclusion Our case is learning lesson to consider possibility of Mumps as differential diagnosis irrespective of previous immunization status and also to remember comorbidities associated with infective pathology like Griesel syndrome.

Therefore we proceeded with abdominal ultrasound which revealed an evidence of ileocolic intussusception. Initial standard management of ileocolic intussusception was attempted by radiological pneumatic reduction (air enema) which was unsuccessful. Subsequent definitive surgical management achieved by laparotomy and manual reduction successfully released the obstruction.

He recovered uneventfully and underwent usual post-surgical care.

**Discussion** A recent study showed about 4% of children diagnosed with intussusception had one or more neurological symptoms recorded at presentation. Lethargy was the most frequent, followed by hypotonia, generalised weakness, paroxysmal events, and fluctuating consciousness. One study reported a series of 13 cases of children whom impairment of the mental state preceded the appearance of common gastrointestinal symptoms. Another distinctive feature is the presence of miosis. The aetiology is unclear but there has been hypothesis that this could be caused by the production of endogenous opioid in response to stress and pain.

**Conclusion** This case illustrates a rare occasion of intussusception presenting as an acute encephalopathy in the absence of typical signs of bowel obstruction.

Although uncommon, the recognition of this possibility should be entertained, particularly in an unexplained encephalopathy.

**INTUSSUSCEPTION ENCEPHALOPATHY: A CLINICALLY DECEPTIVE PRESENTATION**

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10.1136/archdischild-2021-europaediatrics.57

A 7-month-old presented with reduced responsiveness and non-bilious vomiting. On presentation, he was encephalopathic, aphyreal with normal vital signs. Pupils were intermittently mictic and initial abdominal examination was normal. Investigations including blood gas, biochemistry, inflammatory markers, metabolic and toxicology panels were normal. A CT brain scan showed no abnormality.

Abdominal examination 24 hours later elicited a possibility of tenderness.

**58 COMPARATIVE CHARACTERISTICS OF THE ETIOLOGICAL SPECTRUM OF ACUTE VIRAL RESPIRATORY INFECTIONS IN PEDIATRIC PATIENTS IN UKRAINE DURING 2018-2020**

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10.1136/archdischild-2021-europaediatrics.58

**Background** Acute respiratory viral infections (ARVI) continue to be the main reason for seeking pediatric care in Ukraine. Comparative characteristics of etiological spectrum of ARVI in Ukraine has not been sufficiently studied.

**Aim of Study** To investigate the etiology of ARV in comparison between epidemiological seasons 2018-2019 and 2019-2020.

**Methods** The study was conducted in the Eurolab clinic (Kyiv, Ukraine) during the period 2018-2020. Nasopharyngeal swabs, collected from ARVI children aged 2 months to 16 years old, were analyzed by multiplex real time polymerase chain reaction for 7 viruses – Respiratory Syncytial virus (RSV), Parainfluenza virus (PIV), Adenovirus (AdV), human Metapneumovirus (hMPV), Rhinovirus (RV), human Bocavirus (hBoV) and Coronavirus (CoV). Rapid influenza diagnostic testing was used.

**Results** 147 samples were collected during the period from October 2018 until February 2019; 125 (85,0%) were positive: hMPV – 33 (26,3%), IVA – 28 (22,4%), RV – 21 (16,8%), RSV – 10 (8,0%), hBoV – 7 (5,6%), AdV – 5 (4,0%), PIV – 4 (3,4%). Diagnosis of pneumonia was established in 18% of children infected by hMPV and 21% of children with IVA infection. Other clinical manifestations of hMPV infection were: tracheobronchitis, obstructive bronchitis, bronchiolitis, rhinopharyngitis, laryngitis. 12 of the children with RV infection had symptoms of rhinopharyngitis,