Therefore, caution should be exercised when interpreting radiological recordings so that antibiotic therapy is not unnecessarily prescribed.

**411** THE ROLE OF COMBINED MULTICHANNEL INTRALUMINAL IMPEDANCE-PH MONITORING IN INFANTS WITH BRUE (BRIEF, RESOLVED, UNEXPLAINED EVENT)

Ivan Pavčič*, Marta Navratil, Maja Bosanac, Jadranka Sekelić Fučić, Irena Ivković Jureković, Iva Hojsak. Department of Pediatrics, Children's Hospital Zagreb, Zagreb, Croatia

The data on the relationship on gastroesophageal reflux (GER) and brief resolved unexplained events (BRUE) in infants are scarce. The aim of this study was to investigate the diagnostic usefulness of combined multichannel intraluminal impedance-pH (MII-pH) monitoring in children with suspected GER-related BRUE. Infants hospitalized due to BRUE and who were referred for 24-hour MII-pH monitoring from January 2012 to September 2017 were prospectively included in the study. All children underwent 24-hour MII-pH monitoring using a MII-pH ambulatory system (Ohmega, MMS, Enschede, Netherlands). The impedance recordings were analyzed using criteria described in a consensus statement on indications, methodology and interpretation of combined MII-pH monitoring in children.

Twenty-one infants (mean age 4.7 months; range 0.9 to 8.9 months; male/female 10/11) participated in the study. Irregular breathing/apnea associated with GER was found in 10 (52.4%) of infants. Based on pH-metry alone only 7 (33.3%) infants would be diagnosed with GERD. More than 100 GER episodes detected by MII were found in 10 (47.6%) infants. Nineteen percent of infants had GERD diagnosed based on both pH-metry and MII. Acid and non-acid reflux seems to have a significant role in the pathogenesis of GER-related BRUE.

**412** MEDIASTINAL TERATOMA MIMICKING NONRESOLVING PNEUMONIA

Mateja Segović*, Tonči Gajoja, Mirko Žganjer, Igor Nikolić, Karmen Konđa, Ivančica Škarč, Ivan Pavčič. Community Health Center of Varaždin County/Children's Hospital, Zagreb

A teratoma is a tumor of germ cell origin, composed of tissues or organ components from more than one germ cell layer. While mature forms are benign, immature teratomas may be malignant. It is important to emphasize there is always a risk of malignant transformation from the usually benign type. Mediastinal teratomas are uncommon in pediatric age and account for 7-11% of extragonadal teratomas. The specific localization of mediastinal teratoma is anterior or middle mediastinal compartment and rarely posterior mediastinum. Considering their incidence is very rare in children they can very often be misdiagnosed. They are difficult to diagnose in early stage due to very few nonspecific symptoms in the beginning and also can be asymptomatic. Due to complications while spreading to the adjacent structures, first manifestation can also be acute and dramatic.

We report a case of 14-year-old boy, with severe neurodevelopmental deficit, who was initially suspected to have pleuropneumonia which was radiologically verified as paracardial homogenous consolidation in lower and middle right lung fields as well as an infiltrative attenuation at the base of the left lung. Within less than a month, after antimicrobial therapy, on follow up X-rays infiltrative lesion at the base of left lung completely regressed.

However, homogeneous consolidation on the right along with a newly noticed calcification persisted, therefore lung CT scan was done. CT scan showed large tumor in the right thorax with characteristics of a teratoma. During right sided thoracotomy a large encapsulated tumor was found. Tumor occupied almost all total right hemithorax, it also adhered to surrounding structures, especially pericardium. Tumor was completely excised along with a part of pericardium, pathohistological diagnosis was mature cystic teratoma. Postoperative recovery was complicated by dependency on mechanical ventilation which was resolved by tracheostomy. However, new difficulties with spontaneous ventilation arose due to atelectases; these were treated with 5 bronchoscopies along with bronchoalveolar lavages. Eventually boy was referred to local hospital in good general condition with stable respiratory status. Rest of the postoperative recovery was uneventful.

When facing nonresolving pneumonias clinician should always think of broader differential diagnosis. If pathological findings on radiological imaging persist, a clinician should consider organic causes of diseases and broaden diagnostic investigations so that both true diagnosis and adequate treatment can be reached and initiated in timely fashion. After surgical treatment, a long-term clinical, laboratory and imaging follow up is necessary.

**413** PULMONARY ABDCESS AS A COMPLICATION OF PNEUMONIA CAUSED BY S.PNEUMONIA

Sanela Dragoja Gilgora*, Ivan Bambir, Sandro Dessardo, Jadranka Kelečić, Dorian Tjelić-Drinković. General Hospital Zadar, Pediatric Clinic KBC Zagreb

In the pre-antibiotic era, a significant number of patients who developed a lung abscess died. The introduction of antibiotics has reduced morbidity and mortality, but a lung abscess remains one of the complications that can occur during the treatment of pneumonia, and its treatment can be a challenge. S. Pneumoniae is one of the most common causes, especially in children.

We will present a case of treatment of a lung abscess as part of pneumonia in a three-year-old boy. The disease presented by pneumonia with fever, weakness and cough and elevated inflammatory parameters (CRP, BKS).

Radiologically, an extensive inflammatory infiltrate was found in the upper and middle lobes of the right lung, and an ultrasound examination also found the presence of a pleural effusion. Initial antibiotic therapy (ceftriaxone + azithromycin) was introduced in the external institution. Upon admission to our institution, due to the progression of clinical and radiological findings accompanied by effusion, confirmed by ultrasound examination, treatment continued with antibiotics (ceftriaxone + clindamycin) and corticosteroids. In the