done. After surgery, T4aN1bM1 – stage IV was established. Neoplastic markers were all negative and a KRAS gene mutation was detected.

Currently, she has a fully implanted central venous catheter and is doing adjuvant chemotherapy.

Conclusion Iron deficiency anemia is very common in adolescents but sometimes worst diseases emerge. Adenocarcinoma in adolescents is very rare and is commonly diagnosed in advanced stage presentation. Diagnostic is facilitated when abdominal symptoms begin or when there are familiar predisposing syndromes.

67 PATHOMORPHOLOGICAL FEATURES OF RHABDOMYOSARCOMAS IN PEDIATRIC PATIENTS

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We want to explore the specific morphological manifestations, determine the frequency of different histological variants, as well as identify local mutations of genes determining the development of these tumors.

Medical records and histological preparations of 7 children treated with the diagnosis were analyzed at the pathologic department of St.

Petersburg State Medical University: 'Rhabdomyosarcoma' from 2001 to 2018. Histological preparations were photographed using a Pannoramic Midi 2 scanning microscope.

- Numerous star-shaped and elongated, spindle-shaped cells irregularly distributed among the stroma were found in embryonic RMS (ERMS) preparations. Elongated cells with eosinophilic cytoplasm with transverse striations in the cytoplasm were also detected.

- In pleomorphic RMS, tumor cells were determined to have a variety of shapes, including rocket-shaped, with oval nuclei and small nuclei. Large foci of myxomatosis of tumor stroma were observed.

- Alveolar rhabdomyosarcoma (ARMS) was characterized by the presence or formation of alveolar structures lined by rounded or oval-shaped tumor cells. The nuclei of these cells were kidney-shaped and/or lobulated, with a well-defined cytoplasm. Hyalinized fibrous septa were detected.

- Alveolar and pleomorphic RMS are formed from elements of muscle tissue, and in rare cases alveolar from endothelial progenitor cells after reprogramming and myogenic transdifferentiation, while ERMS has a dysontogenetic origin, that is arises from detached rudiments of muscle tissue and are transverse muscular tissue hamartoblastomas.

- Alveolar RMS is a more malignant and less differentiated tumor, for which reason the mortality rate in patients with ARMS is significantly higher than in other types of RMS.

- ARMS are associated with the FOXO1 gene fusion return system found in 90% of cases.

- 56 mutations were found in 28% of ERMS cases and included 7 mutations in rate in the RAS family, 4 mutations in FGFR4, 3 mutations in PIK3CA, 2 mutations in CTNBN1 and single mutations in BRAF and PTPN11.

68 ACUTE OTITIS MEDIA IN CHILDREN, DIAGNOSIS AND MANAGEMENT

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Acute otitis media (AOM) is considered to be one of the main causes of bacterial infection in children, being a major cause of admission to the emergency department (ED) and antibiotic prescription. The prescription of antibiotics in AOM should be carefully thought, due to the increased resistance to antimicrobials.

A retrospective, descriptive, comparative analysis of a randomized pediatric population (n=1646) admitted to the ED between november 2014 and december

2019 with the diagnosis of AOM was performed. Exclusion criteria included age <28 days, chronic diseases associated with nasopharyngeal colonization by unusual microorganisms, craniofacial malformations or presence of cochlear implants. Clinical and therapeutic information was collected through clinical records. Deferred antibiotic prescription (DAP) was considered if 48 hours of anti-inflammatory therapeutic was advised before initiating antibiotics.

Statistical analysis was performed and $p < 0,05$ was considered statistically significative.

Amongst all patients, 54,3% were males and in 85,7% it was their first medical observation. The median age, at admission, was 3 years with median time of illness evolution 2 days.

Mean age was higher in the group that reported fever (3,00 vs 5,29 years, $p < 0.01$) and conjunctivitis (1,62 vs 4,01 years, $P < 0.01$), unlike in the group with otalgia (5,31 vs 1,94 years; $P < 0.01$) and otorrhea (4,54 vs 3,72 years $P < 0.01$).

DAP was the chosen conduct in 6,8% of cases, none of them <6 months.

Bilateral otitis was present in 12,3% of cases, 58,6% of which happened <2 years, with recorded DAP of 0.08% in this last group. We registered 2 cases of mastoiditis and 1 fungal infection; none had gone through DAP. Number of illness days (2,38 vs 3,12; $p < 0.01$) and patients age (5,05 vs 3,83; $p < 0.01$) was different between those with DAP vs initial antibiotic prescription.

The mean duration of antibiotic treatment in the group <2 years was 7,31 ($\pm 1,02$) days and in with ≥ 2 years was 6,83 ($\pm 1,4$) ($p < 0,01$).

Of the 1531 to whom antibiotic was prescript, 270 (17,6%) were medicated with other antibiotic than amoxicillin (excluding cases of amoxicillin allergy, recent amoxicillin, therapeutic failure and conjunctivitis).

Amoxicillin was prescribed in 66,8% of cases, followed by amoxicillin/clavunate in 20,8%, which was more prescribed in the population with associated conjunctivitis (30,3%).

Our study showed that AOM is a benign infection, with DAP not revealing worst prognosis, as described in literature. However, DAP is still underperformed, being necessary its practical application, as well as the use of first-line antibiotics, supported on current recommendations.