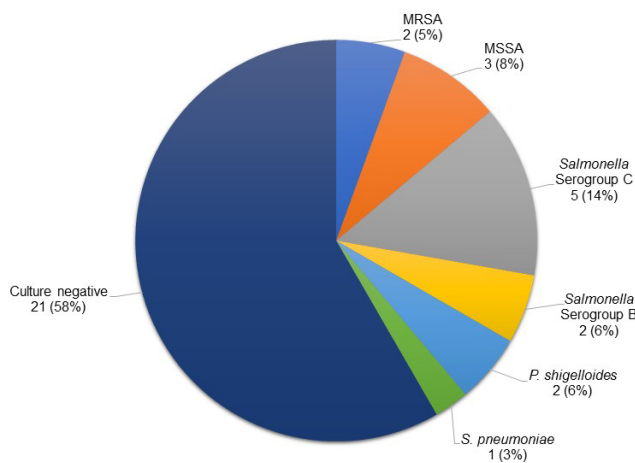


Figure 1. Etiology of Osteoarticular Infections in Patients with Sickle Cell Disease



Disclosures. All authors: No reported disclosures.

1519. Identification of *Neisseria meningitidis* (Nm) Nasopharyngeal Carriage Among Non-Vaccinated Children and Isolations in Invasive Disease (ID) Cases in Argentina 2017

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Background. *Neisseria meningitidis* (Nm) cause different types of invasive infections. Nm pharyngeal carriage is a necessary condition for invasive meningococcal disease. In 2017 Argentina introduced a tetravalent meningococcal conjugated vaccine (MenACYW) to the National Immunization Program. Aims To assess the rate of Nm carriage in healthy children and adolescents attending a public hospital in Buenos Aires city, to determine genogroup and clonal complex distribution, to describe genogroup distribution of Nm isolated from ID in Argentina, during the same period.

Methods. Between March and December 2017, a single-center, cross-sectional study was performed among 1,751 children 1-17 years old attending Ricardo Gutiérrez Children Hospital in Buenos Aires, Argentina. From oro-pharyngeal swabs, genogroup and clonal complex (CC) were identified. We analyzed Nm ID genogroups data reported to the Regional Surveillance Program (SIREVA II) in the same year, at the same period were re-evaluated.

Results. 114Nm were isolated from the carriage study, with an overall carriage of 6.5%. Genogroups distribution: B 25(21.9%), W 9(7.8%), Y 7(6.1%), Z 6(5.2%), C 4(3.5%), non-groupable 9(7.8%) and non-capsulated (NC) 54 (47.3%). 105 Clonal complex (CC) were determined: Genogroup B isolates belonged to ST-41/44, ST-35, ST-32 and ST-865. Genogroup W was associated to ST-11 and ST-35. SIREVA reported 76 strains of Nm invasive infections in 2017, 53.9% meningitis, 11.8% meningitis and sepsis, 22.4% sepsis, and 11.8% others. Genogroups distribution: B 59.2% (45), W 23.6% (18), C 10.5% (8), Y 6.5% (5).

Conclusion. Genogroup B is the most frequent cause of ID followed by W in our country. In the pharyngeal carriage study we found that NmNC was prevalent and genogroup B was the most frequent among the encapsulated. Genogroup B CCs detected in our carriage study coincided with those found previously in ID in Argentina. Genogroup W carriage was low and hypervirulent CC ST-11 was detected. Although genogroup Z does not cause ID in our country it was found in carriage.

Disclosures. All authors: No reported disclosures.

1520. *Streptococcus anginosus* Group Organisms Are an Increasing Cause of Complicated Sinusitis and Otitis Media in Children

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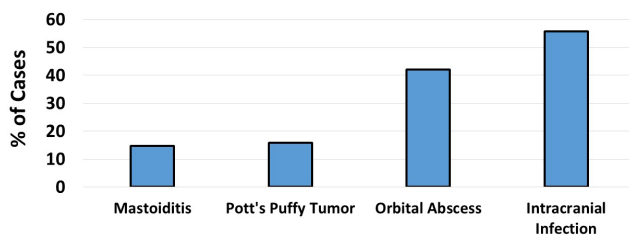
Background. The *Streptococcus anginosus* group (SAG), including *S. anginosus*, *S. intermedius* and *S. constellatus*, are common flora of the oral cavity, respiratory tree and gastrointestinal tract. However, these organisms have the potential to cause serious invasive infections and are notably pyogenic. We observed an apparent increase in the frequency of intraorbital and intracranial infections resulting from SAG at Texas Children's Hospital (TCH). We undertook a retrospective review to describe the frequency and clinical features of these infections.

Methods. We reviewed the database of the clinical microbiology laboratory at TCH from 2011 to 2018 for SAG-positive cultures. For purposes of this study, cases included were those associated with 1) either otitis media or sinusitis and 2) Pott's Puffy Tumor, orbital abscesses, epidural abscesses, subdural empyema, brain parenchymal abscesses, dural enhancement by imaging or mastoiditis. Similar methods were used for SAG identification throughout the study period. The number of cases per year was used along with annual hospital admissions data to estimate case rate; case rate trends were examined using linear regression.

Results. 950 cultures positive for SAG were identified by the clinical lab; 95 cases met inclusion criteria. The median age of patients was 11.4 years. Specific diagnoses are presented in Figure 1. *S. intermedius* was most commonly isolated (81.1%) followed by *S. constellatus* (12.6%) and *S. anginosus* (7.4%); 50.5% of cases were polymicrobial. Among polymicrobial cases, *S. aureus* was most frequently isolated (25%). All patients underwent surgical intervention and 20.5% underwent ≥2 procedures (Figure 2). 16.8% were associated with intracranial thromboses and 4.2% with CNS infarcts; 8.4% of patients experienced persistent neurologic deficits. All isolates were susceptible to penicillin. We observed an increase in the annual disease rate during the study (Figure 3, P = 0.01).

Conclusion. Complications of otitis media and sinusitis due to SAG are associated with substantial morbidity. These infections are becoming increasingly common at our center although the precise reason for this temporal trend is unclear. Multicenter studies are needed to validate these epidemiologic findings.

Figure 1. Diagnoses*



* Categories Not Mutually Exclusive

Figure 2. Surgical Procedures Performed

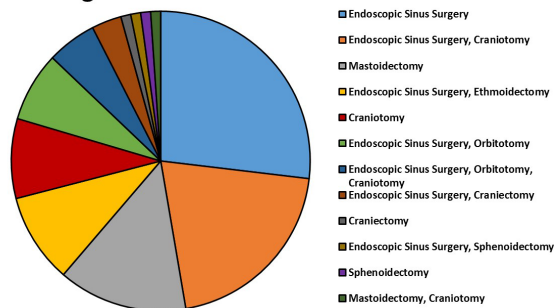
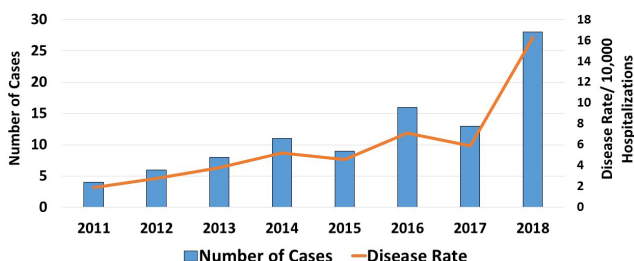


Figure 3. Disease Rate, 2011-2018*



*p<0.01 across all years; p=0.002 for 2017 vs. 2018

Disclosures. All authors: No reported disclosures.