

Risk factors of retropharyngeal abscess

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Abstract

Many clinicians in the ENT find very difficult to diagnose the stage of infection and therapeutic options and also RPSAs lead with very limited literature available to focus the treatment option in limited resource set up. The main cutting edge of the study aims to correlate post surgical complications of RPSAs and also we know the age related incidence. A prospective and retrospective study was undertaken in the Department of ENT, BMCRI. The incumbent laboratory parameters like throat culture was done for all the suspected patients , Complete blood counts (CBC) , X-ray the results revealed that a total sixty suspected pediatric patients were were studied prospectively and retrospectively for the period of two years ,out of which males 35 and females was 25 respectively. The mean age of the patient was 8.96 ± 1.25 years (IQR 4-14years) median age was 10 years radiological impressions and Computed tomography (CT) scan was done at the greater accuracy. Reduced width of the air column is most common after post surgical intervention and it was found to be statistically significant ($p < 0.00$) with respect to lower age group of the population. More research could be intervened to prevent the infections at poor resource set up.

Keywords: Retropharyngeal abscess, Demographic profile, Surgical intervention, Prospective design.

Introduction

A retropharyngeal abscess will occur, due to infection of tonsils commonly in children. It usually needs to be drained and treated with antibiotics. RPSA is an abscess located in the tissues in the back of the throat behind the posterior pharyngeal wall .Because RPAs typically occurs in deep tissue, they are difficult to diagnose by physical examination alone. The signs and symptoms of retropharyngeal abscess are difficulty in breathing, difficulty swallowing, drooling, fever, severe throat pain, stridor (a high-pitched wheezing during inhalation), muscle spasms around the ribs when breathing. Many ENT-clinicians find difficult to diagnose the stage of infection and therapeutic options. The main cutting edge of the study aims to correlate post surgical complications of RPSAs and also we know the age related incidence and complications.

Materials and Methods

A prospective and retrospective study was undertaken in the Department of ENT, BMCRI, Bangalore during the period of 2015-16. The incumbent laboratory parameters like throat culture was done for all the suspected patients , Complete blood counts (CBC), X-ray radiological impressions and Computed tomography (CT) scan was done at the greater accuracy. The demographic profile and other defined parameters were collected from the pretested questionnaires and also exposed risk factors were collected and correlate with infection distribution. The collected data was analyzed by using SAS-16.50 version. Univariate analysis was performed to test the hypothesis.

Results

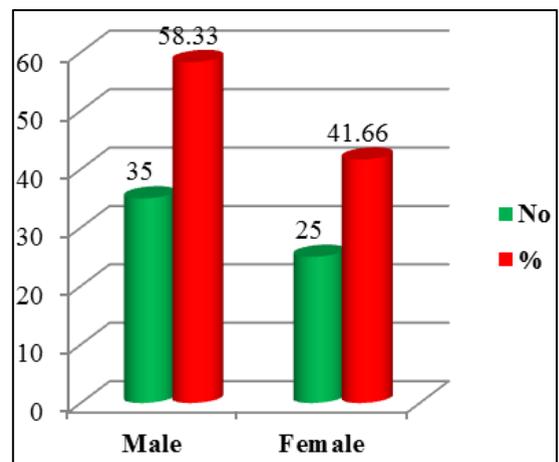


Fig. 1: Gender distribution

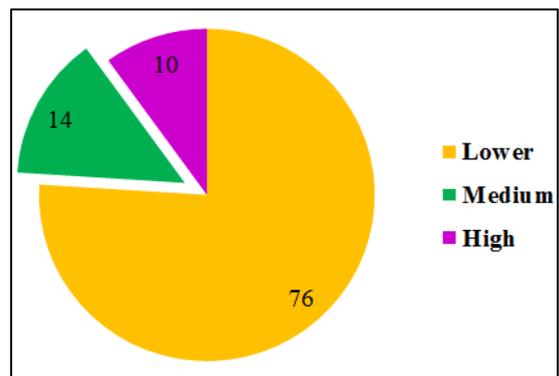


Fig. 2: Family economic status

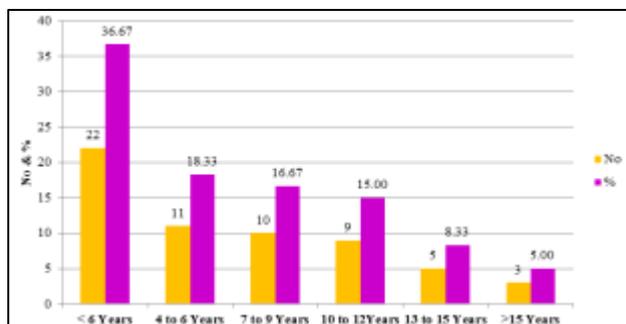


Fig. 3: Age distribution of the patients

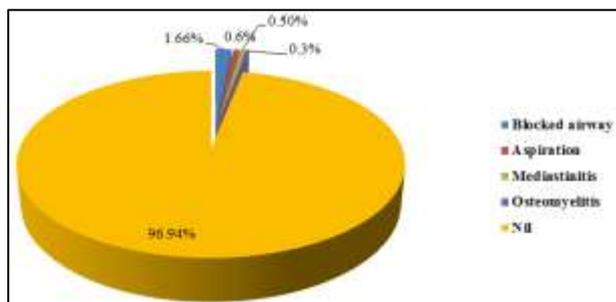


Fig 3: Surgical post complications in RPSAs Patients

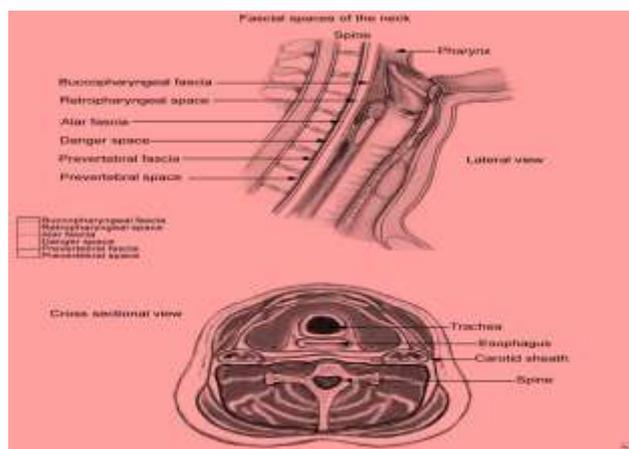


Fig. 4: Anatomy of deep neck spaces- as illustrated in lateral and cross-sectional views. Fascial planes (see color key) surround potential spaces.

Table 1: Significance level of RPSAs post complications

Complications	%	P-value
Blocked airway	1.66	0.00**
Aspiration	0.6	0.12ns
Mediastinitis	0.5	0.82ns
Nil	96.94	0.00**

** Significant at 1% level, ns-Non significant

The results revealed that a total sixty suspected pediatric patients were prospective and retrospectively studied for the period of two years ,out of which males 35 and females was 25 respectively. The mean age of the patient was 8.96±1.25 years (IQR 4-14years) median age was 10 years. As per the demographic profile of the RPSAs categorized in to three groups viz., Low income was 76.0% ,medium was 14.0%

and high income was 10.% presented Fig. (1)&(2).The maximum number of children were affected in the age group between 3-6 years (36.67%) and it was found to be statistically significant (p<0.01) followed by 6 to 8 years and >10 years respectively .The post surgical complications were correlated by univariate analysis , the results revealed that blocked air way accounted 1.66% ,aspiration was 0.60% , mediastinitis was 0.50%. Blocked air is the most common after post surgical intervention and it was found to be statistically significant (p<0.00) with respect to lower age group of the population.

Discussion

The present study has documented to focus an uncomplicated cases of retropharyngeal abscess have been relatively healthy pediatric patient; the prognosis was complete recovered without sequelae. As complicated cases could be associated with significant changes were noticed after the surgical intervention a total 4.0% of the patients had acquainted with defined complications and positively associated with risk factors. Many authors suggest that, the assessment of a patient with a potential deep neck space infection was more and found to be statistically significant (p<0.01) .Airway compromises should be immediately will be identified and addressed the surgical procedures. Evaluation by an otolaryngologist, if possible, should be obtained. Large abscesses were not been noticed during the study period .The compress the pharynx or trachea, causing suffocation were noticed with RPSAs patients. The abscess was ruptured and causing aspiration and complications.

The Proper positioning and avoidance of unnecessary manipulation is essential for preventing the RPSAs. Closely monitor patients with airway compromise, and do not allow these patients to leave the acute care area until deemed sufficiently stable conditions. Present study accord to revealed that ,the blocked air is the most common there after post surgical intervention and it was found to be statistically significant (p<0.00) with respect to lower age group of the population.

Conclusion

The present study concludes that the spread of infection to the deeper tissues, and can lead to acute emergency conditions in children. More research could be intervened to prevent the infections at poor resource set up.

Conflict of Interest: None.

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