Presentation and Management of Neck Abscess: Have Things Changed Over A 20 Year Period.

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INTRODUCTION

Our recent clinical experience with deep neck space infection indicated a difference in the presentation, etiology and bacteriology compared to a previously published report from our institution. Therefore we decided to evaluate: (i) the change in the presentation, physical examination, bacteriology, and empiric antibiotic therapy for patients with a deep neck space abscess compared to the previously published report and, (ii) the incidence of MRSA related infection in our current patient population.

METHODS AND MATERIALS

IRB approved retrospective analysis of patients who underwent incision and drainage of neck abscess in the operating room between 12/2008-12/2012 at LAC+USC Medical Center. Comparison was made with previously published historical data. Data analysis was done using SAS 9.1.

RESULTS

44 patients were included in the present study (vs. 51 in previously published study). Compared to the previously published report from our institution, there has been a statistically significant difference in (i) most common presenting symptom: dysphagia vs pain; (ii) location of neck abscess: parapharyngeal vs submandibular; (iii) etiology: upper respiratory tract infection (URI) vs intravenous drug abuse (IVDA); (iv) higher prevalence of anaerobic bacteria (v) MRSA was present in only 1 (2%) patient; (vi) Clindamycin was empiric antibiotic in 77% of the patients, with the need for change after culture report in 5 patients. Chi-square p-value was <0.05 for all comparisons.

Conclusion: URI and odontogenic infections are now the major cause of neck abscesses. Clindamycin is an appropriate empiric antibiotic.

DISCUSSION

There were several interesting observation in our current study that differed from the 1988 study from our institution. In the previous study pain, fever, and swelling were the most common presenting symptoms. However in the current study dysphagia/odynophagia, pain, and swelling were the most common presenting symptom. This is explained by a higher percentage of abscesses being located in the parapharyngeal and retropharyngeal spaces.

URI was the major cause of the deep neck space abscess in the current study accounting for 34% compared to only 6 % in the previous study. IVDA as an etiology was significantly lower (2%) in the current study compared to 28% in the previous study. This can be attributed to the changing trends in substance abuse. The increased purity and concern about AIDS may have caused the shift from injecting to smoking and sniffing among heroin users.

In the current study, the majority (77%) of the patients with deep space neck abscess were started empirically on clindamycin and only 5 (11%) needed change based on culture results. In contrast, the majority of the patients in the previous study were treated with Penicillin G along with oxacillin or methicillin.

REFERENCES