Glandular Fever Test in Quinsy Patients

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Abstract - Title: Glandular Fever Test in Quinsy Patients: RF068

Problem Addressed:
Incidence of quinsy is quite rare in glandular fever patients. Early reports have suggested the implications of corticosteroids in the development of such abscesses. A retrospective study was carried out at a district general hospital in UK to know the presence of positive glandular fever test in peritonsillar abscess patients.

Methods and Measures:
Through the hospital computerised medical record system (PAS), the lab data of all the consecutive quinsy patients admitted in the ward between March 2004 and June 2005 is studied for a positive glandular fever test.

Results:
One out of 100 patients of quinsy had positive glandular fever test (1%), in which steroid was used for potential airway difficulty. The organism grown was mixed anaerobic infection and responded to the appropriate antibiotic.

Conclusions:
In all tonsillitis or quinsy patients, who were having high lymphocyte count, glandular fever test should be done. Steroid should be avoided unless a potential airway risk is vehemently present.

Clinical Significance of Study:
1. Use of steroid has increased the chance of getting peritonsillar abscesses in glandular fever patients.
2. In our hospital, the laboratory policy is to do the glandular fever test on blood samples in all tonsillitis patients are having high lymphocyte count. This can be extended for peritonsillar abscess patients as well

Introduction
• Quinsy (Gr. Kynanche sore throat) better known as peritonsillar abscess is a collection of pus between the fibrous capsule of the tonsil and the superior constrictor muscle of the pharynx.
• It may arise de novo or as a complication of acute tonsillitis. Glandular fever is among one of the significant cause of acute tonsillitis.
• Exact incidence of quinsy in a glandular fever patient is not known.
• Early reports have suggested the implications of corticosteroids in the development of such abscesses (Parulekar et al and handler S. D. et al).

Methods and measures
• Incidence of quinsy is quite rare in glandular fever patients. A retrospective study is carried out at a district general hospital in UK to know the presence of positive glandular fever test in peritonsillar abscess patients.
• Through the hospital computerised medical record system (PAS), the lab data including routine blood test and results of monospot test of all the consecutive quinsy patients admitted in the ward between Mar’04 and Jun’05 is reviewed for a positive glandular fever test.

Results
• Median age group was between 10-40 years and Male to female ratio was 2:1
• One patient out of 100 patients of quinsy had positive glandular fever test (1%) at the time of presentation.
• Short course of steroid was used for potential airway difficulty in all patients of quinsy patients who were having high lymphocyte count. This can be extended for peritonsillar abscess patients as well
• The organism grown was mixed anaerobic infection and responded to Metronidazole.
• Median Hospital stay for quinsy patient was 3 days with or without glandular fever...

Discussion
• Quinsy is often regarded as a complications of tonsillitis.
• It was hypothesized that spread of infection in tonsils and development of quinsy is because of the presence of anaerobic infection (Jokinen et al 1985).
• The neck space infection following tonsillitis is more common in debilitated patient with conditions which predispose to infection e.g. diabetes or immuno-suppressed states.
• Glandular fever caused by EBV, infects B-lymphocytes and causes tonsillitis and pharyngitis. Humans are the only source of EBV and transmission is by the hospitals route (Thereby also known as kissing disease). Incubation period is ~ 20-30 days.
• Massive B-cell proliferation leads to the production of heterophile antibody by second week (Positive Monospot test).
• In response to the infected B-cells, CD8+ T-lymphocytes exhibit both suppressor and cytotoxic function and present as an atypical mononucleosis cell (forms 20-40% of white blood cells). There is reversal of CD4+/CD8+ T lymphocytes ratio.

Conclusions
• Many of the clinical manifestations of infectious mononucleosis may result, atleast in part, from the host immune response, which is also effective in reducing the number of EBV-B-lymphocytes to <1/106 of circulating B-lymphocytes.
• Diagnosis of glandular fever is based on clinical findings and tab tests. Elevated lymphocyte white cell count ratio above 0.35 has a sensitivity of 90% and specificity of 100%.

Use of steroid has increased the chance of getting peritonsillar abscess in glandular fever patients. Steroid should be avoided unless a potential airway risk is vehemently present.

Glandular fever test should be done only in those tonsillitis or quinsy patients in whom lymphocyte count is high or L/WBC ratio is more than 0.35.

In our hospital, the laboratory policy is to do the glandular fever test on blood samples in all tonsillitis patients who are having high lymphocyte count. This policy can be extended for peritonsillar abscess patients as well.