Why *Streptococcus pneumoniae* is Present in Eye Patients?

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Letter to Editor

Streptococcus pneumoniae a Gram positive diplococci is the most frequent bacteria isolated in patients with eye infection[1] as well as other diseases such as Pneumonia, Arthritis, Sinusitis and Otitis Media[2]. *Streptococcus pneumoniae* may produce endogenous and exogenous eye infection. Dramatic endophthalmitis may occur after cataract surgery due this microbial agent. These infections are more frequent in immuno-compromised patients. Frequently the germen come from the lacrimal sac or nasolacrimal duct. This constitutes an evident exogenous ocular infection. More rarely has been published endogenous eye infection by this Gram positive diplococci. During a episode of pneumonia may occur and endogenous endophthalmitis[2]. Positive culture has been demonstrated in vitreous samples. Treatment in these cases is the same that in postoperative cases.

Exogenous or endogenous remain in controversy. In absence of ocular surgery or penetrating traumatism may constitute and endogenous infection. If the germen is isolated in the culture, a foci of infection should be investigated. Uveitis, vitritis, retinal vasculitis and papillitis has been reported due autoimmunity against proteins of Streptoccccus B-hemolitic[3,4,5]. *Streptococcus pneumoniae* is an alpha-hemolitic germen. Cases of endogenous inflammation without positive culture and known foci of infection by this germen may be also autoimmune pictures? This possibility has been not reported. In addition, the *S. pneumoniae* is a pyogenic bacterium with enhanced virulence due to its capsule that allows escape from immune response[6,7,8]. Further research may clear more details.

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