

The neurosurgeon Mayfield, through his research in the 1980s, felt that there might be an immune response that is responsible for the degree of reaction, especially to chemical insult.

Frank et al cultured arachnoidal cells in vitro and demonstrated their immune capabilities. ( [\[i\]](#) )

Russian authors ( [\[iii\]](#) ; [\[iii\]](#) ; [\[iv\]](#) ) have discussed changes in the immune indices in cerebral arachnoiditis (rhinosinusogenic and optochiasmatic).Khil'ko et al( [\[v\]](#) ) describe a deficiency in immunoglobulin

A which they explain as due to "an increase in their consumption due to antigenic aggression in relation to the meninges, which results in extremely low circulating levels of circulating immunoglobulins A."

Also Filev et al ( [\[vi\]](#) ) have found persistent viruses in immunocompetent blood cells in cerebral arachnoiditis.

However, these findings refer to infective arachnoiditis and it is difficult to know how far they could be extrapolated to spinal arachnoiditis of other aetiologies.

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[\[i\]](#) Burton CV appearing in Neurological Surgery, Third Edition, Volume 4, pp: 2856-2865

[ii] Blagoveshchenskaia NS, Mukhamedzhanov NZ *Zh Vopr Neurokhir* 1989 Jul; 4:6-10 [The role of the immune system in the development of rhinosinusogenic intracranial complications].

[iii] Blagoveshchenskaia NS, Mukhamedzhanov NZ Simonova AV *Vestn Otorinolaringol* 1988 Sep;5:3-6 [Diagnostic value of immunologic methods in rhinosinusogenic cerebral arachnoiditis].

[iv] Mukhamedzhanov NZ , Blagoveshchenskaia NS, Simonova AV *Zh Nevropatol Psikhiatr Im S S Korsakova*  
[Clinico- immunologic studies in rhinosinusogenic cerebral arachnoiditis].

[v] Khil'ko VA, Usanov EI, Khlunovskii AN, Umerov Ekh, Pashkhina MN *Zh Nevropatol Psikhiatr* 1985;85(12):1  
789-1792

[vi] Filev LV, Volchek IV, Kotsiubinskii NN, Khil'ko VA *Voen Med Zh* 1991 dec;12:25-26 [The detection of persisting viruses in immunocompetent blood cells in cerebral arachnoiditis].