Post Head Injury Low Grade Meningitis

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Introduction: Neurosurgeons often face many complications after head injuries, one of these complications is "low grade meningitis" which of normal and sterile CSF and does not respond to empirical antibiotic treatment (e.g. combinations of beta-lactams).

Aim: To reveal the nature and show the incidence of a hiding pre-traumatic pathologic agent that causes many post traumatic events one of them is our subject here the "Low grade meningitis".

Method and patients: Over 20 years of my career I found near to one third of head injured patients of all ages and both genders who recovered from any trauma severity at least in Iraq and two other Arabian countries show features of low grade meningitis either they show it as they regain consciousness or very short period of 2-3 days after head injury with or without history of loss of consciousness. Features are very variable could be all, or some of them available, and could be rising with time or stationary; Head ache, photophobia, irritability in pediatric age group, anorexia, intermittent low grade fever, periodic malaise, meningism, Babinski, Kernig’s sign and Brudzinski’s sign and reflex (or simply neck stiffness), CT scan is negative for SAH, CSF nearly normal, CSF/C/S is sterile for bacteria and AFB (Tb), culture is difficult for Brucella around us. CSF sample is negative for TB in PCR not done for Brucella due not available in general hospital and expensive in private sector. As a traditional work in or centers in Iraq and some of Arabic countries I work in the patient is either already on a wide a spectrum beta-lactam antibiotics as a prophylaxis (amoxicillin and ceftriaxone of different doses) or he put on them when developed such a picture. Results: patients do not respond to such regimen for long time even when amoxicillin is replaced by vancomycin. While very good and dramatic response when patients are given Doxycyclin and cotrimoxazole when above six years and cotrimoxazole alone or Azithromycin plus cefixime in usual doses below six years.

Discussion: This interpretation was born from two facts; First, as I am originally interested in the biological bases for the surgical pathologies which gave me a good visions to many events as long as I proceed in this prospect. The second, intermittent or undulant low grade fever if present!! relative good general health of the patient in presence of the above mentioned clinical picture generally give a clue to presence of a pre-traumatic opportunistic hiding infection, or it might be presented differently, but the community consider it either with normal limit, or an unexplained ill health triggered by some other usual events (in third world this is seen as low weight or any other feature like poor appetite before the trauma). For that the possible causative agent in this regard is chronic Brucellosis. We lack the PCR kits to prove it in public hospitals, serology is not dependable and it is negative in most of these patients who recovered dramatically. Other possible pathogens whom I enlisted need to be proved and discriminated from Brucella, but due to our severe shortage in modern lab aids we could not do so.

Conclusion: If this very successful trial treatment and concept is true!!! We need to re-direct our principles and efforts not to treat post traumatic meningitis successfully only, rather we to have look on the incidence of hidden pathologies which might be the same all over the world which forms an underestimated national hazards. HOW or why national hazards?? because the one third of my patients over very long time (20 years; 5 years as a resident and 15 as specialist) is a considerable number in any community general health considerations.

Recommendations: For me, I seek from interested organizations the aid to proceed with detection of the real causative agents with PCR and other modern lab techniques. Generally I depend on my personal resources which are not much, also on the patients when seeking my medical services in private sector which also is not much in a country suffers from crises for decades especially the present war on ISIS like Iraq. And I hope this mode of analysis and treatment is applied elsewhere if such complication is found, with knowledge sharing.

Biography
Abbas Alnaji completed his Degree in Neurosurgery FICMS NS from University of Baghdad 1999. He is interested in research work and have twelve papers published in the field of Surgical Pathology Causations.

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