Spinal infection treatment

Spinal infections require a multidisciplinary approach to be treated and solved. A guideline to drive physicians in the deep complexity of such a disease is extremely helpful. SIMP suggests a flow-chart built upon clear concepts such as right and well managed antibiotic therapy, sound stability of the spine, correct and smart use of the standard and functional imaging techniques, such as f18 FDG PET/CT. In 16 months a total of 41 patients have been treated for spondylodiscitis, discitis and vertebral osteomyelitis by our team of physicians and 25 patients have been enrolled in a prospective study whose target is the assessment of the SIMP flow-chart and of every single aspect that characterize it [1].

Minimally invasive surgical techniques show a great potential as to be safe, effective, with low surgical morbidity and fast patients' recovery [2].

Infection with spinal instrumentation

see Spinal instrumentation infection.

Hyperbaric Oxygen Therapy

HBO therapy was given to 19 iatrogenic spinal infection cases between 2008 and 2013. Adjuvant HBO therapy was applied to cases which had exhibited no improvement in clinical and laboratory findings despite medical treatment for at least 3 weeks. Many parameters including demographic characteristics, surgical area, etiology and the surgical treatment modality, microbiology (culture material, the causative organism), clinical and laboratory results, duration of HBO therapy and the outcome were reviewed.

The mean age was 54.6 years (range: 32-75 years). Iatrogenic spinal infections were most frequent in the lumbar region. It occurred following spine instrumentation in 12 cases and following micro-discectomy in 7 cases. The average number of HBO therapy sessions applied was 20.1 (range: 10-40). Wound discharge and clinical and laboratory findings recovered in all cases at the end of the therapy course. No revision or removal of the instrumentation was necessary in the instrumented cases.

HBO therapy is a treatment modality, which is safe and efficient as an adjuvant therapy in the treatment of infections. It was also seen to be effective in the prevention of revision procedures and instrument failures in iatrogenic osteomyelitis cases, which had occurred following spinal instrumentation [3].

Negative pressure wound therapy

see Negative pressure wound therapy

1)

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