



CERVICAL ARACHNOIDITIS (C-ARC)

Arachnoiditis (ARC) means inflammation of the arachnoid covering of the spinal canal. On an MRI of the cervical spine the only sign is thickening of the arachnoid-dural covering. Very little has been written about cervical arachnoiditis (C-ARC). Why? There are no cauda equina nerve roots in the neck. On lumbar contrast MRI's, the cauda equina nerve roots can be seen to be inflamed, clumped, and stuck to the arachnoid-dural covering by adhesions to definitely diagnose Adhesive Arachnoiditis (AA). This diagnostic convenience is not available to us when it comes to the neck. The diagnosis of cervical arachnoiditis is therefore made by a combination of symptoms, physical examination, and supportive MRI findings.

IMPORTANCE OF DIAGNOSING: In our experience it is usually accompanied by cervical intervertebral disc degeneration and spinal fluid flow obstruction, which can lead to intracranial hypertension and cranial CSF leaks. Our studies tell us that C-ARC may be the MOST painful disorder, exceeding that of AA and metastatic bone cancer.

USUAL HISTORY AND SYMPTOMS: Degeneration of cervical discs, Trauma to cervical spine (injury, ESI, prior surgery), Pain on extension of neck, Weakness in arm or hand, Restriction of arm extension, Headaches, Shoulder and upper arm muscle spasms, and Contractures of shoulder and upper back muscles.

MRI FINDINGS: Narrowing of spinal fluid stream (stenosis), Disc protrusion, and Thickening of arachnoid-dural covering.

In Summary: The diagnosis of C-ARC is clinical and a physician's judgement. We have developed these criteria to help make the diagnosis.

1. Severe pain which increases with forward flexing or backward extension of the neck.
2. History of trauma or disease involving the neck.
3. A contrast MRI shows little or no passage of spinal fluid on one side of the spinal cord. (Spinal fluid obstruction occurs because the arachnoid lining thickens from inflammation. This MRI finding may sometimes be called stenosis, may or may not mention intrinsic.)
4. Blood tests may show elevated inflammatory markers. (CRP, ESR, Cytokine Panel)
5. One or more arms show weakness, decreased reflexes, or diminished range of motion.
6. The degree of pain is often disproportionate to the amount of mechanical stenosis!

CERVICAL ARACHNOIDITIS is grossly underdiagnosed. Patients are routinely told that they have arthritis, degeneration, or cervical radiculopathy. Often followed by recommendations for ESI or fusion, both of which can make matters worse!

Our 3 Component Treatment Protocol, as for AA, is strongly recommended. Intractable pain must be adequately addressed as well.