



DIAGNOSIS OF LUMBAR-SACRAL ADHESIVE ARACHNOIDITIS (AA)

AA is diagnosed by the presence of typical symptoms, physical abnormalities, diagnostic tests, and confirmed by magnetic resonance imaging. An early diagnosis is highly encouraged in order to begin treatment and prevent intractable pain, neurologic complications, and extreme suffering.

I. COMMON SYMPTOMS

1. Back and buttock pain that radiates to legs
2. Bladder dysfunction (urgency, dribbling, can't stop)
3. Bizarre skin sensation (crawling insects, water dripping)
4. Burning feet or throat
5. Leg and ankle weakness, foot drop
6. Positional pain (temporarily improved on standing/reclining)
7. Blurred vision, headache, tinnitus
8. Leg pains, cold sensations
9. Loss of feeling in extremities
10. Shooting pains on turning of hips

II. COMMON PHYSICAL FINDINGS – NON-SPECIFIC/COMMON

1. Leg weakness – one side is common
2. Pain on straight leg raising
3. Loss touch/vibration sensation in foot, ankles, cold to the touch
4. Restriction of range-of-motion in arms and/or legs
5. Decreased reflexes – unilateral
6. Pain on pressure over lower lumbar-sacral area
7. Asymmetry of back musculature
8. Skin indentation of mid-back/spine area

III. DIAGNOSTIC STUDIES SUPPORTING AN AA DIAGNOSIS

1. Electromyogram (EMG), abnormal in the majority of cases
2. Cytokine/interleukin, about 60 to 70% of persons with AA have interleukin elevations
3. Epstein-Barr Virus, about 60% show viral reactivation by elevations of the early nuclear antigen antibody (Early EBNA) or polymer chain reaction (PCR) test. Over 90% show elevations of nuclear antigen antibody (EBNA) suggesting the presence of autoimmunity.

IV. CONFIRMATION BY MAGNETIC RESONANCE IMAGING: An MRI of the lumbar-sacral spine (axial and lateral views) will show clumps or individual nerve roots attached to the arachnoid membrane (inner) lining of the spinal canal cover.