



Arachnoiditis Revised-Bulletin 19 August, 2019

THE EQUIVOCAL OR INCONCLUSIVE MRI

Adhesive arachnoiditis (AA) is diagnosed on an axial MRI (foot to head) that shows cauda equina nerve root clumping that is adhered (“glued”) to the arachnoid lining (meninges) by adhesions. Prior to clumping and adhering to the arachnoid lining, some nerve roots will enlarge (“edema”), displace, and present an asymmetrical picture. Be clearly advised. In the early phase of the development of AA or in mild cases, some nerve roots may appear to cling together, enlarge, or displace, but don’t clearly form clumps. This is a major problem in interpretation. “Is there early or mild clumping or maybe not?”

The lateral (sagittal”) MRI views in confirmed cases also show such signs as thickened nerve roots, dilated lower spinal canal (“thecal sac”), spinal fluid flow obstruction, and possible leakage or seepage. The lateral view, however, is less precise and a diagnosis of AA is not usually possible solely on the lateral view.

What should be done in equivocal or marginal cases? We recommend a blood test for inflammatory markers and therapeutic trials with the potent, anti-neuroinflammatory drugs, ketorolac and methylprednisolone. If a patient’s pain and some other symptoms improve with the trial, a mild or early case of AA is likely. The treatments for AA should then be instituted, providing the patient has a typical history and physical findings of AA.

In summary, unless there is definite nerve root clumping with adhesions causing adherence to the arachnoid lining of the spinal canal, the MRI must be considered “inconclusive”, “possible”, or “equivocal”.

**DR. BEAK says,
In equivocal cases,
medications that suppress
neuroinflammation should be
given a therapeutic trial.**

