

History of myelography with pantopaque contributing to arachnoiditis

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Received: 11 June 14 Accepted: 12 June 14 Published: 28 August 14

This article may be cited as:

Pawl R. History of myelography with pantopaque contributing to arachnoiditis. *Surg Neurol Int* 2014;5:S315-6.

Available FREE in open access from: <http://www.surgicalneurologyint.com/text.asp?2014/5/8/315/139617>

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When I entered the practice of neurosurgery in the mid 1960s, the only method available for analyzing the contents of the spinal canal was myelography using Pantopaque injected into the spinal fluid as a contrast agent. Pantopaque was an oil-based medium, thus denser than water, containing an iodinated chemical that interfered with X-ray penetration, so that the soft tissue contents of the canal were outlined on fluoroscopy as the patient was tilted head up or down on a table and appropriate radiographs were taken. It was not absorbable and had to be removed by aspiration which proved formidable, thus some was, more often than not left, in the canal. Pantopaque was irritating to the leptomeninges, and it was not uncommon to find arachnoiditis present to one degree or another if and when repeat studies were carried out.^[2]

MULTIDISCIPLINARY PAIN CENTERS TREATING COMPLEX PAIN SYNDROMES INCLUDING ARACHNOIDITIS

Multidisciplinary pain treatment centers are often asked to treat patients with arachnoiditis attributed to various modalities, but no longer including Pantopaque myelography. Having formed one of these treatment centers, I assembled a team of nurses, physical and occupational therapists, psychologists, and physicians. Every referred patient was seen by a member of each component of the team, had their past medical history and all treatments/studies reviewed, including the following.

Psychological testing: An essential part of the pain center evaluation

The psychologist in the team performed psychological testing and a structured exam prior to initiating treatment.

The personality testing used by our team was the Minnesota Multiphasic Personality Inventory (MMPI).^[1,3] The testing revealed elevations on the scales 1 and 3 (out of 10), indicating somatization; often depression and anxiety were found and less often, a manipulative tendency (scales 4 and 9) or propensity for secondary gain was found. The latter included remuneration for being wronged (e.g. work injury or an auto accident), while others were often more subtle (e.g. obtaining love, e.g., holding a marriage together or avoiding onerous life circumstances). Without such complete psychological profiles, it was almost impossible to achieve the goal of rehabilitation of such patients.

ADHESIVE ARACHNOIDITIS, FIBROMYALGIA: CHRONIC PAIN COMPLAINTS THAT ARE DIFFICULT TO DIAGNOSE AND TREAT

Chronic pain syndromes attributed to adhesive arachnoiditis and fibromyalgia are often quite similar. Frequently, these patients do not exhibit focal neurological deficits that can be clearly defined; rather their complaints consist of diffuse poorly localized pain and generalized physiological and psychological “dysfunction.” Unless the psychosocial issues are appropriately recognized and addressed, the likelihood of

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10.4103/2152-7806.139617

successful treatment is minimal to none. Furthermore, the treatment of such ill-defined “conditions” further deteriorates when multidisciplinary medical teams cannot work together. Additionally, as discussed, the patient had a history of alcohol abuse; such substance abuse needs to be separately addressed within the comprehensive treatment protocol.

“PEARLS” FOR THE SURGICAL COMMUNITY

The author should be commended for calling attention of the surgical community on the need to distinguish

chronic pain complaints from surgical lesions warranting operative intervention. That is commendable, as long as the basic concepts of chronic pain treatment are utilized.

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