The diagnosis of adhesive arachnoiditis requires the exclusion of other causes of Failed Back Surgery Syndrome, such as recurrent disc herniation, residual disc fragments, spinal stenosis, spondylosis of the spine and epidural fibrosis.

In particular, it is vital to identify treatable causes for pain and loss of function.

The most common spinal lesions associated with FBSS are:

- Instability
- Stenosis
- Recurrent disc herniation
- Missed lesions
- Intraneural fibrosis -- epidural fibrosis
- Arachnoiditis
- Soft tissue dysfunction
- Facet syndrome
- Internal disc disruption
- Pseudoarthrosis
- Adult tethered cord syndrome

Note that tethered cord syndrome is a treatable cause of FBSS.

Yamada and Lonser ([1]) noted that

"Too often, adult patients with TCS are misdiagnosed as having "failed back syndrome.""

TCS manifests as severe back and leg pain, a subtle onset of motor/sensory changes and musculoskeletal deformities.

Other causes of polyneuropathy should also be considered, especially those of autoimmune origin (see above).

It is interesting to note that a number of patients have a dual diagnosis of arachnoiditis and multiple sclerosis (MS). This is presumably due to similarities between the two conditions.

Fibromyalgic symptoms are likely to be part of the arachnoiditis syndrome, as opposed to being due to a separate disease entity.

Patients may have a dual diagnosis of arachnoiditis and fibromyalgia (or chronic fatigue). Features of myofascial pain and malaise are a common occurrence as part of the arachnoiditis syndrome.

Note that 70% of patients with FMS meet the CDC criteria for CFS (Buchwald 1987) and two thirds of patients with CFS meet the ACR criteria for FMS (Goldenberg 1990b)

. FMS and myofascial pain syndrome (MPS), while probably separate entities, often coexist (*Granges 1993*)

It seems unlikely that these patients have three separate disease processes. There is obviously a considerable degree of overlap between these conditions.

Limb symptoms may have been previously diagnosed as Reflex Sympathetic Dystrophy (RSD).

The possibility of thyroid disorder should be especially borne in mind in patients who have a history of myelogram, whether oil-based or water-based, due to the high iodine content of the

dyes involved.

Below is a brief list of some possible diagnoses that might be used instead of arachnoiditis:

Musculoskeletal

- Facet joint
- Degenerative disc disease etc.
- Fibromyalgia
- Failed Back Surgery Syndrome
- Disuse syndrome
- Spinal stenosis
- Epidural fibrosis

Neurologic

- Post stroke pain syndrome
- Peripheral neuropathy
- Postherpetic neuralgia
- Radiculopathy
- Complex Regional Pain Syndrome
- Multiple Sclerosis

Infectious

- Cellulitis
- Infectious arthritis

Vascular

Raynaud's disease

Rheumatic

- Rheumatoid arthritis
- Systemic lupus erythematosus

Psychiatric

- Depression
- Malingering

The similarity of arachnoiditis and CRPS

In broad outline, adhesive arachnoiditis, in particular the chemically-induced type could be categorised as Complex Regional Pain Syndrome Type II. (CRPSII), also known as causalgia.

In broad outline, adhesive arachnoiditis, in particular the chemically-induced type could be categorised as Complex Regional Pain Syndrome Type II. (CRPSII), also known as causalgia.

Complex regional pain syndrome may be initiated by trauma or as an iatrogenic complication after surgical procedures such as arthroscopy and carpal tunnel release.

Complex regional pain syndrome has also been reported following nerve injury caused by intramuscular injection or routine venepuncture and as an adverse reaction to subcutaneous allergy injections.

In addition, the syndrome has been associated with medical conditions such as diabetic neuropathy and multiple sclerosis. The syndrome is estimated to occur in 1 to 5 percent of patients who have sustained peripheral nerve injury (type II).

The actual incidence of complex regional pain syndrome is unknown.
Reflex Sympathetic Dystrophy: (Complex Regional Pain Syndrome Type I): Causalgia
"If Hell were a clinical medical condition, it might look something like reflex sympathetic dystrophy or RSD."
Tom Haederle, Johns Hopkins University.
A number of patients who have a history of risk factors for arachnoiditis are diagnosed with Reflex Sympathetic Dystrophy (RSD), which is also known as Complex Regional Pain Syndrome Type I.
This is characterised by severe burning pain in a limb, occurring usually after trauma or surgery.
There is often an element of allodynia and hyperpathia. Autonomic effects include sudomotor (sweating) and vasomotor (vascular) abnormalities.
There are changes in limb temperature, discolouration and oedema.
Later stages may involve joint stiffness, loss of mobility and osteopaenia or osteoporosis (loss of bone density), as well as skin texture and hair growth changes.
The frequent occurrence of this condition in arachnoiditis suggests that the RSD type symptoms are in fact a part of the arachnoiditis syndrome, rather than a separate disease entity.

There are several cases in which arachnoiditis and RSD have both been diagnosed.

RSD is a disease of the nervous system that begins with involvement of the sympathetic nervous system in a limb, generally after relatively minor trauma, including surgery. Onset is typically within days or weeks of the event.

CRPS Type II (causalgia) is a more widespread phenomenon. Arachnoiditis and Multiple Sclerosis

As we have seen, these two conditions share a number of features, notably nerve pain (often trigeminal neuralgia in MS), painful muscle spasms, spasticity and loss of function. These symptoms are often exacerbated by heat in both conditions.

A number of patients with arachnoiditis also have either an established or suspected diagnosis of MS. Unfortunately, one of the diagnostic tests for MS is a lumbar puncture, which is contraindicated in cases of arachnoiditis.

[1] Yamada S, Lonser RR. *J Spinal Disord* 2000 Aug; 13(4):319-23 Adult tethered cord syndrome.