

Spine Clinics

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A case of Tavlov Cyst

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Welcome

Welcome back to a new series of Spine Clinics 2012. This year, we will be presenting a series of common and not so common conditions, together with a brief write up of its diagnosis and treatment options. Hopefully, this will be of use when you treat your patients.

PRESENTATION

This 36 year old Chinese male presented with right buttock pain radiating to the back of the thigh and occasional pain in the perianal region. Pain is worse with walking for a distance and with sitting. Straight leg raise was limited to 60 degrees on the right. There was no neurological deficits at rest. There was no bladder or bowel abnormalities. He was otherwise well. When first seen, he had symptoms for 1-2 months. Sitting and walking for more than 5 minutes caused discomfort.

INVESTIGATIONS

Investigations included MRI of the Lumbosacral spine which showed a large Tavlov Cyst at S1 on the right and S2 on the left. There was no bony erosion.

MRI of the cervical and thoracic spine showed no neural compression.

MRI of the right thigh and hip showed mild hip effusion but was otherwise normal.

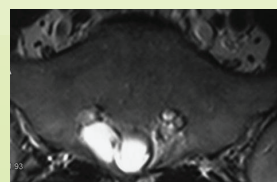
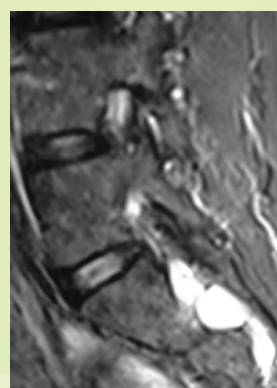
Neurologist opinion was that symptoms were due to pressure from the Tavlov Cyst as there were no other pathologies found.

TREATMENT

Symptoms were persistent for about 6 months despite observation and medications. He also tried acupuncture. He was very much affected as he could not sit comfortably even for even 5-10 minutes. Surgery was eventually done after 6 months of symptoms.

SURGERY

There was a large cyst at S1 and S2 communicating with the main dural sac via a narrow neck. The pressure in the cyst changes with filling of the cyst. Sacral nerves travel through the neck of the cyst to exit the sacral canal. As such, we decided on simple decompression of the S1 root and a laminectomy and not excision of the cyst which will require sacrifice of sacral nerves passing through the neck of the cyst.



PROGRESS

Soon after surgery, he could sit longer for about 1-2 hours. Walking was improved to 20 minutes. However, it took several months for him to recover more and when seen 6 months post surgery, he was able to sit 4-5 hours before feeling some aches and walk quite normally.

DISCUSSION

Tavlov cysts are meningeal dilations of the posterior nerve root sheath that most often affect sacral roots. The distinctive feature of Tavlov cyst is the presence of nerve fibres in the cyst wall or within the cyst itself. It is estimated to affect 5-9% of the population.

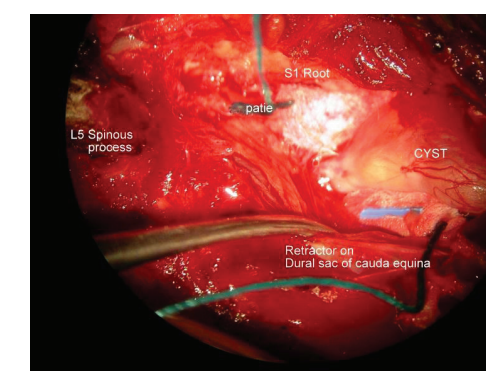
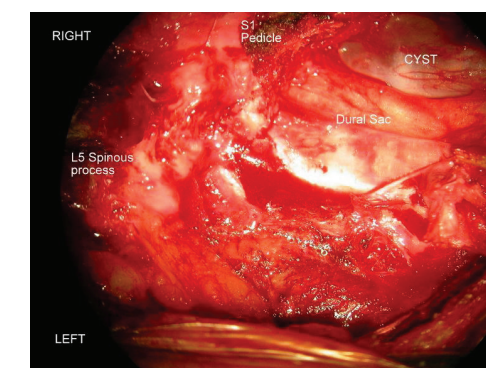
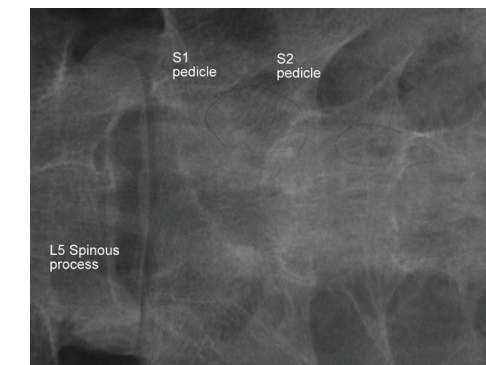
Most Tavlov cysts are small and asymptomatic and are often incidental findings on MRI scans. Asymptomatic cysts do not need treatment.

Some large Tavlov cyst may however cause symptoms. Backache, radicular symptom and even bladder and bowel dysfunction have been reported.

Treatment of symptomatic cysts is controversial and include changes in lifestyle, aspiration and steroid injections. Some suggest that surgical treatment provide a more permanent solution.

There is no one agreed surgical treatment for tavlov cysts. Options have included simple decompression, drainage and excision of the cysts.

This is one of the few instances when I have treated a patient with symptomatic Tavlov cyst surgically. Fortunately he has done well with simple decompression.



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Orthopaedics International, Neurosurgery International and Sports Medicine International are a group of registered specialist practices comprising 8 orthopaedic surgeons, a neurosurgeon and a sports physician. Operating out of 4 locations within Singapore, we aim to provide patients with comprehensive and professional care for all musculoskeletal, neurosurgical and sports-related conditions. Each specialist brings a range of interests, expertise and sub-specializations to the group, and is also a senior doctor with a minimum of 20 to 30 years of relevant clinical experience behind him. We strongly believe in a team approach, so that every patient of ours will be treated with the highest standards of expertised care that are available.

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