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SYRINX IN AN OLD CASE OF POTT'S PARAPARESIS: A CASE REPORT

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ABSTRACT
The development of syrinx may be due to developmental anomally in spinal cord. It may also occur due to trauma, ischemia and intramedullary tumour. A young 23 year old female came to opd with chief problem of loss of sensation (pain, temperature) in right upper half of body, which include right upper half of chest, right shoulder and upper arm. She was treated adequately for Pott's spine at the level of D4/D5 with mild paraparesis, without neurogenic bladder and bowel in 2009. Now since last six month she is much worried due to dissociated sensory loss of pain, temperature in her right upper half of body without appreciable fresh motor weakness in any of her limb. She is normotensive, nondiabetic with no history of addiction or drug abuse. Bony ankylosis of D4 and D5 vertebral bodies is seen on MRI dorso lumbar spine. An irregular syrinx is seen extending from C7 to D10. A small cystic area seen within the syrinx at D7 level. Any dissociated sensory loss of pain and temperature in upper half of the body including upper arm should make high degree of suspicion for syrinx in cervico-dorsal region of spine especially in case of tubercular pathology.

INTRODUCTION

The development of syrinx may be due to developmental anomally in spinal cord. It may also occur due to trauma, ischemia and intramedullary tumour [1]Syrinx mean cavitation or longitudinal cystic cavity in spinal cord which is referred as syringomyelia. We hereby report a rare case of development of syrinx at the level of C7 to D10 in a treated case of Pott's paraperesis, D4 and D5 level.

CASE HISTORY

A young female 23 year old graduate, unmarried attended Orthopaedic OPD, VPIMS Lucknow in june 2015 with chief problem of loss of sensation (pain ,temperature) in right upper half of body, which include right upper half of chest, right shoulder and upper arm. Her vitals are within normal limit, good built, tall, ambulatory and performing all her household activities. She was treated adequately for Pott's spine at the level of D4/D5 with mild paraparesis, without neurogenic bladder and bowel in 2009 [Fig No 1 and No 2A and 2B]. She showed complete improvement in motor weakness of both lower limbs except grade 2 dorsiflexors in her right ankle. She was ambulatory without any assisted device. After full course of anti tubercular treatment and complete bed rest, she recovered fairly good and resumed her education as well and completed graduation [Fig no.2b]. Now since last six month she is much worried due to dissociated sensory loss of pain, temperature in her right upper half of body without appreciable fresh motor weakness in any of her limb. She is normotensive, nondiabetic with no history of addiction or drug abuse.

RADIOLOGICAL INVESTIGATION

Digital x-ray of dorsal spine revealed no sign of active Tuberculosis. Both previously involved D4 and D5 vertebra shows bony union, June 4th, 2015 [Fig No.3].

MRI OF D/L SPINE

Bony ankylosis of D4 and D5 vertebral bodies is seen. An irregular syrinx is seen extening from C7 to D10. A small cystic area seen within the syrinx at D7 level -? sequelae of myelitis [Fig No 4].

BLOOD INVESTIGATION

All haematological test are within normal limit.

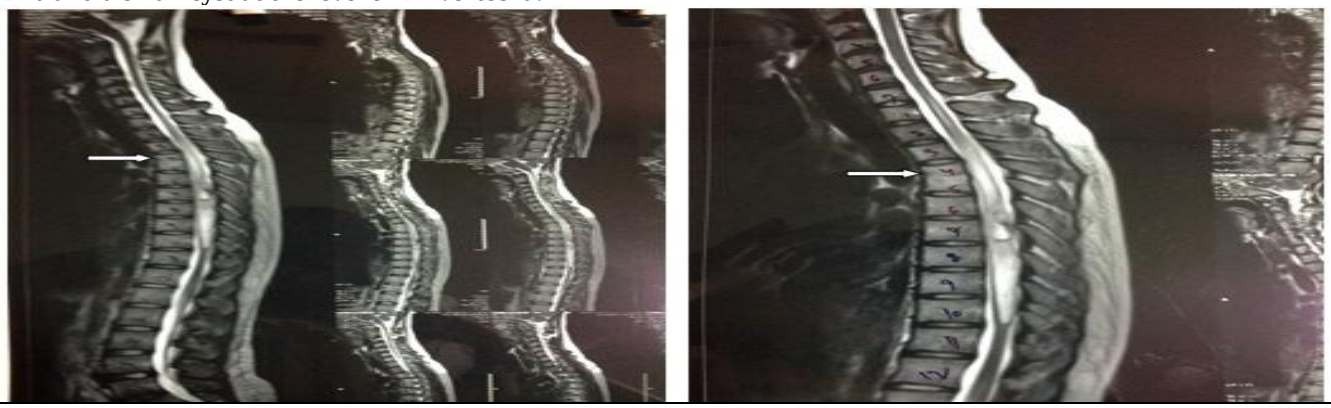
Figure 1. Digital X-Ray of Dorsal Lumber Spine AP and LAT view showing Pott's spine at the level of D4 and D5 in DEC 2009.

Figure 2 A. Digital X Ray of Dorsal Lumber Spine, AP and LAT views showing healing Tubercular lesion at D4 and D5 level, in March 2010.

Figure 2B. Digital x ray of dorsal lumber spine, AP and Lat view showing healed tubercular lesion at D4 and D5 level, in June 2010.

Figure 3. Digital X-ray of Dorsal Lumber Spine AP and LAT view showing healed Tubercular lesion (bony union) at D4 and D5 after nearly five year of followup in June 2015.

Figure 4. MRI of Dorso Lumber Spine showing bony ankylosis of D4 and D5 vertebra, an irregular syrinx from C7 to D10 and a small cyst at the level of D7 vertebra.



DISCUSSION

Syringomyelia is a generic term referring to a disorder in which a cavity forms within spinal cord. The cyst is called as syrinx which can elongate with passage of time, destroying spinal cord. Usually clinical feature are altered sensory loss i.e. loss of pain and temperature and lower motor neuron type of paralysis in upper limb. This occur due to damage to spinothalamic tract (located centrally) which carry pain and temperature information. The differential diagnosis might include Progressive Post Traumatic Syringomyelia, Tethered Cord Syndrome, Myelopathy, Radiculopathy, Plexopathy or peripheral neuropathy [2]. The occurrence of syrinx formation in a properly treated case of Pott's paraparesis is a very uncommonly seen clinical entity in our day to day practice. It has been revealed that patients who did not recover after adequate surgical treatment, then MRI studies have shown myelomalacic and syringomyelic changes [3].

SUMMARY AND CONCLUSION

Any dissociated sensory loss of pain and temperature in upper half of the body including upper arm should make high degree of suspicion for syrinx in cervico-dorsal region of spine especially in case of tubercular pathology.

Isolated moderate thinning of cord or moderate syringomyelia are not incompatible with intact neural status. However, thinning (atrophy) of the cord associated with syrinx and/or myelomalacia and/or arachnoiditis as a rule very poor cord function and despite mechanical decompression, the chance of any worthwhile neural recovery are remote [4]. She was referred to higher centre for review of the case, expert opinion, management and was advised to wait and watch, since no specific treatment is needed presently.

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STATEMENT OF HUMAN AND ANIMAL RIGHTS

All procedures performed in human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This article does not contain any studies with animals performed by any of the authors.

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