

Spine Clinics

C1/ C2 Myelopathy

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Division of Spine Surgery -
Orthopaedic International



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Welcome

This is our inaugural issue of Spine Clinics. This monthly publica-
tion is aimed at providing family doctors relevant and interesting
case studies to highlight particular areas of development in the
fast changing world of spine care.

We hope you enjoy this and subsequent issues.

PRESENTATION

This 55 year old man present-
ed with progressive upper and
lower limb numbness and gait
imbalance over 3 years. When
he eventually decided on sur-
gery he needed assistance
with walking and could not
manage chopsticks. He had
no urinary or bowel compro-
mise.

INVESTIGATIONS

Investigations showed C1-C2
subluxation from Os Odontoi-
deum. This was reducible on
neck extension.



Anterior arch of C1 subluxes
anteriorly narrowing the space avail-
able for cord. This is seen on MRI
scan. The space available for cord
widens on neck extension.

TREATMENT

Surgery was indicated to decompress the spinal cord and stabilise the C1-C2 level.

SURGERY

C1- C2 was reducible on extension and held in position on the operating table. Laminectomy was not required in this situation. C1-C2 was maintained in extension with C1-C2 transarticular screw fixation with additional wiring of the posterior arch of C1 to C2 and bone grafting was done.

RESULTS

On follow up, he gradually recovered his function and is now able to use chopsticks and has gone back to drive a lorry.

WHAT'S NEW IN C1-C2 FIXATION?

C1-C2 fixation and fusion is technically challenging. In the past, C1-C2 fusion was done with wires and bone graft only. Fusion rates are not ideal.

To improve fusion rates, patients may need to be on traction in bed or to wear a bulky halo vest.

C1-C2 screw fixation though technically demanding, allow us to do away with such external stabilisation and achieve good stability and fusion rates.

Post surgery, patients need only wear a cervical brace for several weeks.



Xrays showing C1-C2 transarticular screws and wiring.



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