

CERVICAL NERVE ROOT BLOCK: PAIN MANAGEMENT INTRA & EXTRAFORAMINAL INJECTIONS

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Patients with brachialgia get referred to Royal National Orthopaedic Hospital, Stanmore, UK for CT guided nerve root blocks. This procedure is performed under local anaesthesia.

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Ключевые слова: cervical nerve root block, intra & extraforaminal injections, brachialgia.

КУПИРОВАНИЕ БОЛЕВОГО СИНДРОМА ПРИ ПРОВЕДЕНИИ БЛОКАДЫ НЕРВНЫХ КОРЕШКОВ ШЕИ С ПРИМЕНЕНИЕМ ИНТРА- И ЭКСТРАФОРАМИНАЛЬНЫХ ИНЪЕКЦИЙ

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В королевский национальный ортопедический госпиталь Стэнмур, Великобритания, были направлены пациенты с брахиалгией для проведения блокады нервных корешков под контролем КТ. Данная процедура производилась под местной анестезией.

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Keywords: блокада шейных нервных корешков, интра- и экстрафораминальные инъекции, брахиалгия.

Purpose:
The purpose of this audit was to see if the number of patients who respond to a cervical nerve root block have any difference in their response to the injection if the spread of the original injected medicine was intraforaminal or extraforaminal.

Methods & Results:

Due to the severity of cervical spondylosis, sometimes it is not possible to place the treatment needle within the neural foramen and an extraforaminal injection has to be performed. In order to differentiate between an intraforaminal and extraforaminal injection a contrast medium is injected at the time of the original treatment. If the injected contrast medium spreads within the neural foramen, then it is deemed to be an intraforaminal injection of steroids and local anaesthetic. If, however, the contrast injection is extraforaminal, then the injection of steroids and local anaesthetic would also remain extraforaminal.

The number of patients studied was 105.

There were 75 male patients and 30 female

patients. The age range of the patients was from 37 years to 66 years with a mean age of 57 years.

All of these patients had cervical nerve root blocks at a single level. The most commonly injected level was C5/C6.

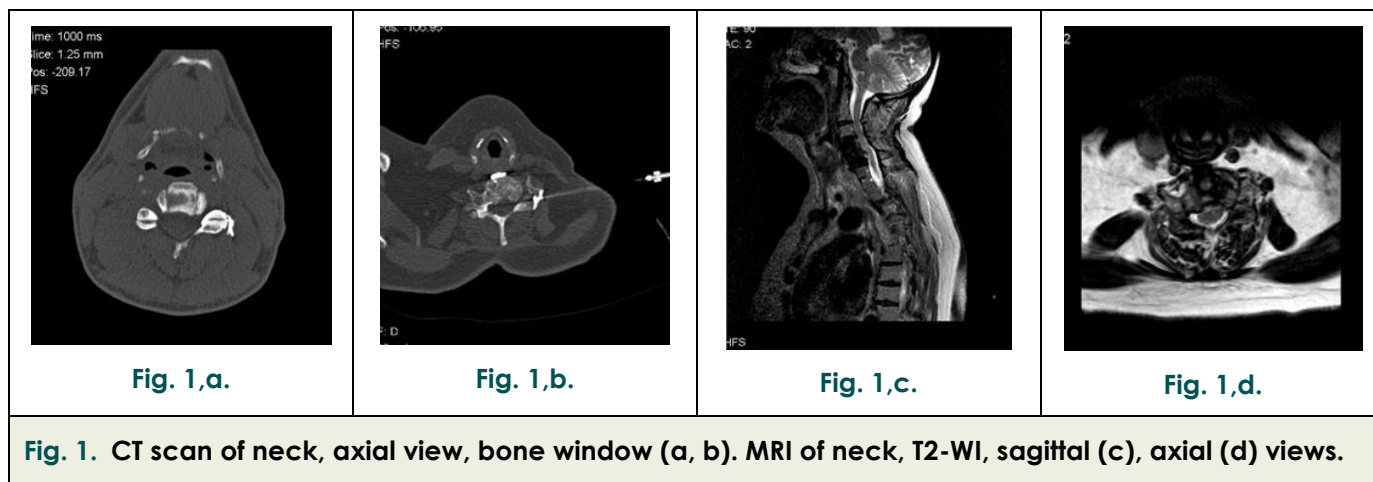
The patients' imaging was assessed to see the degree of foraminal stenosis. This was graded as mild (1), moderate (2) to severe (3).

The number of patients who had an intraforaminal injection was 66. The remaining 39 patients had extraforaminal injection.

The intraforaminal nerve root injections had mild to moderately severe cervical spondylosis (grade 1 or 2), 22 patients had a severe foraminal stenosis (3).

Extraforaminal patients had a severe cervical spondylosis in 26 patients with 13 patients demonstrating a mild or moderate cervical spondylosis.

All the patients who received the injection were given pain recording charts in which they monitored their response to the injection on a scale of 0-10 (0 being no pain to 10 being the



most significant pain they have experienced in their life). Their mean pain score before the injection was 7.5. Following the injection, they filled in the pain recording chart at different periods of time for the next 2 weeks.

It was found that patients who had an intraforaminal injection had their mean pain score drop from 7.5 to 2.5 over this 2 week period.

The mean pain score of patients who had extraforaminal injection had their symptoms reduced from a mean pain score of 7.5 to 5.5.

Two cases. One showing intraforaminal spread. The other showing extraforaminal spread. Note marked cervical spondylosis in extraforaminal case.

Conclusion:

It could therefore be concluded that when the patients have an intraforaminal spread of contrast medium, they respond more adequately to the injection of steroids and local anaesthetic. There is also, however, a consideration to be made that in these patients generally the degree of cervical spondylosis is not as severe as it is in patients who have an extraforaminal spread of the medicine. It is therefore concluded that both these factors play a part in the patients' response to the injection of steroids and local anaesthetic in patients who present with brachialgia and have a background of cervical spondylosis.

Table №1.

	IntraF raminal Injection	Extraforaminal Injection
Number of Patients (75 male and 30 female)	66	39
Degree of Foraminal Stenosis		
- Mild to moderate	44	13
- Severe	22	26
Mean Pain Score		
- Pre – Injection	7.5	7.5
- Post - Injection	2.5	5.5

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