

Cervical Facet Infiltration (CxFI)

Principle

The switching off of nociceptors in the cervical zygapophyseal joint capsule using temporary blocks with a local anesthetic, and a steroid in addition if necessary.

Indication

CxFI is indicated in the cervical syndrome with pseudoradicular radiation into the arm, i. e., radiation that cannot be segmentally identified. Pain projected into the area between the scapulae, arising from the dorsal ramus of the spinal nerve, reacts well to this treatment. This type of pain increases when the neck is extended and axial compression of the zygapophyseal joints is present. Hyperlordotic neck pain is seen with the thoracic kyphosis associated with Scheuermann disease or osteoporosis.

Technique

The injection can be administered to patients in either a sitting or lying position. The neck should not be overly flexed, so that the interlaminar space remains largely

closed. The posterior section of the zygapophyseal joints found at the back of the neck is reached by inserting a thin cannula ~2 cm paravertebral between the spinous processes of C5/6 and C6/7. These lordotic segments are the most common cause of pseudoradicular symptoms in the cervical area. The needle is inserted with permanent aspiration and pre-injection until bony contact is made with the posterior joint facet. This injection can also be carried out with sonographic monitoring (Grifka 1992).

At each location 2 mL of 0.5% local anesthetic is injected into the zygapophyseal joint. A total of 10 mL of local anesthetic is therefore required. Initially, a total of 10 mg cortisone per 10 mL of a 0.5% local anesthetic is recommended as the steroid component of the local anesthetic mixture (Figs. 7.47–7.61).

After the Injection

The procedure following CxFI is comparable to that following CSPA.

Cervical Facet Infiltration Procedure

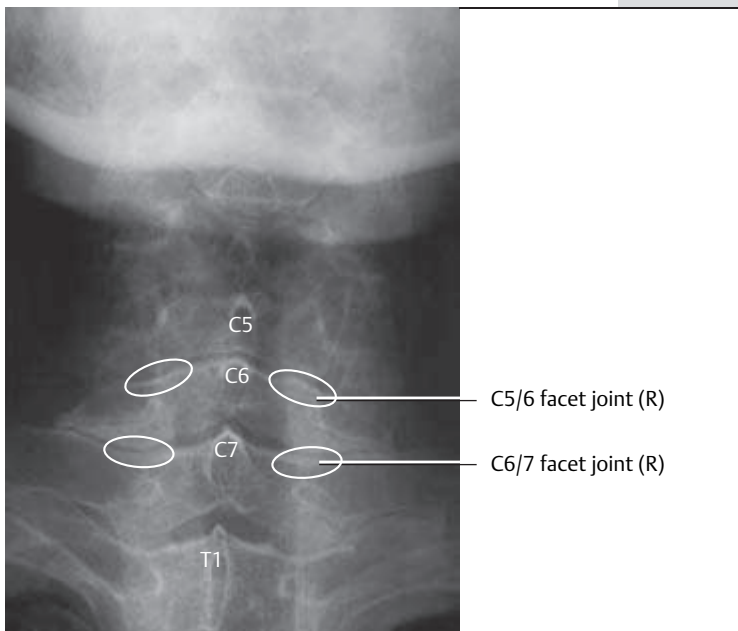


Fig. 7.47 An A/P radiograph of the inferior cervical section. The facet region and the posterior sections of the joint capsule in the inferior cervical vertebral motor segments are targeted.

Fig. 7.48 The patient sits during the injection. The cervical spine should not be placed in as much flexion (compared with the cervical epidural injection and CPSA). This ensures that the interlaminar area remains largely closed.



Fig. 7.49 An assistant positions the head. The skin must be intact and free of infection, especially in the injection area.



Fig. 7.50 The hand position used when locating the C7 spinous process: When both hands are placed on the shoulders, the thumbs meet at C7.





Fig. 7.51a, b A further test is conducted at this stage to safely locate and palpate the tips of the C6 and C7 spinous processes. The left thumb is currently positioned over the C6 spinous process. The C6 spinous process can be palpated well during cervical flexion (**a**), but can no longer be felt during cervical extension (**b**). In comparison, the position of the C7 spinous process remains palpable to the same extent during flexion and extension. C6 and C7 are reliably identified using this method.



Fig. 7.52a, b Marking the spinous processes of C7 (**a**) and C6, C5 (**b**).





Fig. 7.56 Both hands are used to guide the syringe. The left hand is resting on the patient.



Fig. 7.57 The needle is inserted until it comes in contact with the bone.

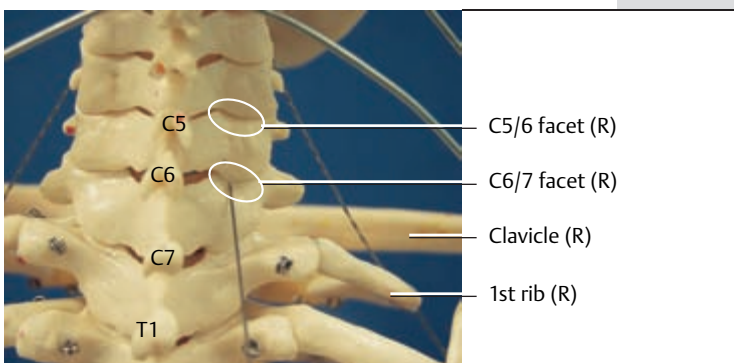


Fig. 7.58 Bony contact, as demonstrated on a skeleton. The bony contact is located more lateral. The needle tip can then be moved more medial. Further insertion is not necessary.

Fig. 7.59 Fan-shaped infiltration of the posterior zygapophyseal joint capsule at the level of bony contact. The syringe is guided by both hands.



Fig. 7.60 Facet infiltration: Posterior view.



Fig. 7.61 Facet infiltration: Lateral view.

