

Cervical Medial Branch Radiofrequency Denervation

Facet joints are pairs of joints that allow movement of the spine. Up to 6 out of 10 people with neck pain and / or headaches may have pain arising from the facet joints. After whiplash up to 1 in 2 people may have pain from the upper facet joints. The nerves that carry information from the facet joints are called the 'medial branch of the dorsal rami'. Radiofrequency denervation may be offered for some people following a successful 'Diagnostic Medial Nerve Block'.

Radiofrequency denervation is a minimally invasive procedure. Radiofrequency energy is delivered along a needle to heat and disrupt the sensory nerve to the facet joint in an attempt to achieve longer lasting pain relief. In addition, local anaesthetic and/or steroid are injected to reduce discomfort after the injection.

Benefits

Pain relief: Reducing pain by up to half is considered a good outcome. Duration of pain relief is uncertain, but current trials suggest relief is maintained for at least 6-12 months. Whilst no study has reported longer term outcomes, pain relief for more than 2 years would not be an unreasonable expectation. If radiofrequency denervation is repeated, we do not know whether the outcomes are similar.

Risks

Common: between 1 in 10 and 1 in 100 people are affected

Tenderness and/or bruising: Mild local tenderness and / or bruising at the site of the injection, that usually settles over the first few days

Pain: A prickling sunburn-like sensation over the skin of the neck, which usually settles with time but may last a few months

Dizziness, giddiness and/or reduced co-ordination: These symptoms are often temporary and are due to the effects on nerves involved in our balance

Altered Sensation: The local anaesthetic may rarely spread causing some numbness or heightened pain sensitivity into the arm. Should this occur, the effect is temporary and will rapidly resolve over minutes or rarely hours

Uncommon: Between 1 in 100 and 1 in 1,000 are affected

Vasovagal syncope (Faint): This is a temporary loss of consciousness of short duration which completely resolves spontaneously

Psoriasis, hair loss and/or dermatoid cyst: This may occur at the site of the procedure

Rare: Between 1 in 1,000 and 1 in 10,000 people are affected

Infection: This is rare. You should seek medical help if there is local warmth or redness over the site of injection with tenderness and/or you feel hot and unwell. This may require antibiotic treatment.

Allergy: Injected local anaesthetic and/or steroid may rarely cause an allergic reaction

Very Rare: Fewer than 1 in 10,000 people are affected

Nerve injury: There are important nerves in the spine, but serious nerve injury is extremely rare (less than 1 in 10,000 cases). Injury to nerves that supply muscles to your arm can lead to disability. Great care is taken during the procedure to avoid this very rare complication by placing the needles carefully under x-ray guidance. The nerve is only treated when the doctor is confident that they are in the right position

References

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