

Cervical Selective Nerve Root Block (SNRB) Understanding Your Risks

This document outlines the risks and potential complication rates associated with cervical selective nerve root block (SNRB). The following information is based on recent evidence from multicenter studies, prospective trials, and consensus guidelines.

Common Risks and Estimated Incidence:

- Any complication: 5–15% (includes both minor and major complications) [\[1\]\[2\]\[3\]\[4\]\[5\]](#)
- Increased pain at injection site: 22.7% [\[2\]](#)
- Increased radicular pain: 18.2% [\[2\]](#)
- Lightheadedness or vasovagal reaction: 13.6% [\[2\]\[3\]\[5\]](#)
- Increased spine/neck pain: 9.1% [\[2\]\[3\]](#)
- Nonspecific headache: 4.5% [\[2\]](#)
- Nausea: 3.4% [\[2\]](#)
- Dizziness: 5.4% [\[5\]](#)
- Minor bleeding or hematoma at injection site: rare (<1%) [\[3\]\[6\]](#)
- Transient sensory symptoms (paresthesia, numbness): 2–5% [\[1\]\[2\]\[3\]\[7\]\[8\]\[9\]\[4\]\[5\]](#)
- Injection site soreness: 5–10% [\[7\]\[5\]](#)
- Transient hoarseness or dysphagia: rare (<1%) [\[1\]\[3\]\[4\]](#)

Most minor adverse events are self-limited and resolve without intervention. [\[1\]\[2\]\[3\]\[7\]\[4\]\[5\]](#)

Serious or Rare Risks:

- Infection (epidural abscess, meningitis): exceedingly rare [\[2\]\[3\]\[4\]](#)
- Allergic reaction to injectate: rare [\[2\]\[3\]\[4\]](#)
- Neurological injury (nerve root irritation, transient or persistent deficit): extremely rare, with no

permanent deficits reported in large series[\[1\]\[2\]\[3\]\[8\]\[4\]](#)

- Vascular injury or inadvertent intravascular injection: risk varies by technique and cervical level, with rates of inadvertent vascular injection reported from 2% to >10% depending on approach and imaging modality[\[10\]\[8\]\[9\]\[6\]](#)

- Catastrophic complications (stroke, spinal cord infarction, paralysis, death): rare but reported, typically related to inadvertent intra-arterial injection of particulate steroid or vertebral artery trauma[\[11\]\[6\]\[4\]](#)

- Hematoma requiring evacuation: rare (<1%)[\[3\]\[6\]](#)

- Permanent neurological deficit: extremely rare[\[1\]\[2\]\[3\]\[8\]\[4\]](#)

- Urticaria or anaphylaxis: rare[\[2\]\[3\]\[4\]](#)

Risk Factors for Increased Complications:

- Advanced age, higher BMI, diabetes, tobacco use, coagulopathy, and multilevel injections are associated with higher complication rates and poorer outcomes.[\[2\]\[3\]\[6\]\[5\]](#)

- The risk of vascular injury is higher at C5–C6 and in patients with variant anatomy.[\[10\]\[8\]\[9\]\[6\]](#)

- The use of particulate steroids increases the risk of embolic events; non-particulate steroids will be used.[\[11\]\[6\]](#)

Patient Acknowledgment: By signing below, the patient acknowledges understanding of the above risks, their estimated incidence, and the potential for both common and rare complications associated with cervical selective nerve root block. All questions have been answered to the patient's satisfaction.

Signature: _____ **Date:** _____

Patient Name: _____ **DOB:** _____

References

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