

# Peripheral nerve injury

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- Neurapraxia - no loss of nerve sheath continuity or peripheral Wallerian degeneration. If the pressure is removed from the nerve, recovery potential is good but may take months.
- Axonotmesis - nerve sheath remains intact, with internal nerve fibre damage and associated Wallerian degeneration. The neural tube (endoneurium) can guide the regenerating nerve fibres to their target. Good potential for recovery; nerve fibre regrowth is at 1 mm per day.
- Neurotmesis - complete division of the nerve, nerve sheath and nerve fibre. Functionally poor outcome without surgical intervention to restore continuity of the nerve sheath. Although the Seddon classification is useful in understanding the pathoanatomy, the critical discriminator in defining recovery, and need for possible surgical intervention, is the presence or lack of continuity of the enveloping nerve sheath.

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