AAHS
AMERICAN ASSOCIATION FOR HAND SURGERY

Nerve Allograft Statement

Surgical repair is the only effective treatment option for a transected peripheral nerve (Sunderland Grade V)[1] and historically, when primary repair is not possible, nerve graft reconstruction is the standard of care for injuries with nerve gaps that require a bridging material.

Since inception in the 1800s autologous nerve grafts, harvested from the injured patient, have been used in nerve graft repair.[2] During autograft nerve repair, the nerve gap is bridged using the patient's own harvested nerve, most commonly the sural nerve.

Nerve allografts, first introduced in 2007, are an alternative nerve graft source. Nerve allograft repair has established clinical evidence for its use and has been implanted more than 100,000 times.[3] Use of nerve allograft avoids the need to sacrifice an intact nerve and obviates the need for a second surgical site. Multiple peer reviewed studies support the use of allograft nerve repair, and demonstrate clinical recovery rates comparable to nerve autografts with evidence based clinical effectiveness.[4,5]

In 2018, Azouz et al. reported a survey of ASSH and AAHS members, showing that 70% of surgeons used nerve allograft in their nerve repair algorithm, with no differences across sub-specialty, and a greater percentage of hand surgeons chose allograft as their first choice to reconstruct a nerve gap when a nerve graft was required.[6] Another CPT database study showed that between 2018-2020 nearly three-quarters of nerve graft repairs (73.5%) were performed using allograft (Raizman et al. 2023),[7] and over this same time the Truven data (Adidharma et al. 2024) showed allograft repairs increased from 53.6% in 2018 to 65.2% in 2020.[8] Nerve allografts are routinely used by nerve surgeons and are an important option for surgeons treating patients with nerve injuries.

Nerve allograft reconstruction is a standard medical practice option for nerve graft procedures and is not experimental. Surgeon access to this medically necessary option is critical when treating patients with nerve injuries.

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