US Market Report for Dural Repair 2017 - MedCore

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Description:
General Report Contents
Dural defects may be repaired either by suturing or applying a dural graft to prevent CSF leaks and facilitate healing. Occasionally, dural tears cannot be closed primarily and dural grafts must be used. Harvested autologous collagenous membrane grafts, such as the pericranium, fascia lata or temporal fascia are routinely used for repair of the dura mater. These native collagen grafts are immunologically tolerated, and reconstituted with host cells and supporting vasculature, eventually becoming completely remodeled. The biological response to autologous collagen membrane grafts in dural repair is ideal based on the fact that native tissue is used. However, sufficient quantities may not always be available, and a second skin incision is required for harvesting some tissue sources like the fascia lata. This could potentially increase the morbidity of the procedure and of course increases the total length of the surgery. Non-autologous dural repair products are alternatives to tissue being removed and grafted from another location in the patient’s body. As such, non-human animal tissue-derived dural patches (xenografts) are an increasingly common form of device used for dural repair owing to their versatility, competitive pricing and outstanding performance. This is followed by the use of grafts composed of synthetic materials (alloplasts), which regularly consist of expanded polytetrafluoroethylene (ePTFE), polyester urethane and polyglactin. This synthetic mesh is the least expensive option available, at the cost of an increased likelihood of postoperative complications. Human tissue-derived products (allografts) perform much better than synthetic products, but are used rarely in dural repair mainly due to the high cost associated with their use.

The dura mater is a tough, fibrous membrane that surrounds and protects the tissues of the brain and spinal cord. Dural repair is primarily performed for head and spinal injuries where a laceration has occurred to the dura, and for neurosurgical procedures in which the dura is required to be opened or removed to gain access to the bones or delicate tissues within. In both cases, effective dural closure is imperative to prevent cerebrospinal fluid (CSF) leakage and permit proper and expeditious wound healing. Since CSF leaks often result in extra time and cost associated with patient care, dural repair performed with appropriate devices is integral for significant savings for surgeons and patients.

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Companies Mentioned:
LifeCell
Organogenesis
C.R. Bard
Ethicon
Covidien
Arthrex
ASTORA
Wright Medical
Integra LifeSciences
Smith & Nephew
MiMedx
Boston Scientific
Systagenix
BioHorizons
Atrium Medical
Coloplast
Stryker
Cook Medical
Johnson & Johnson
Osiris
Soluble Systems
Synovis/Baxter
KCI
RTI Biologics
Geistlich
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Gore Medical
Medtronic
Dentsply
Others include: Medline, MTF, WL Gore, Tutogen, Novus Scientific, Ariste Medical

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