Over 25 percent of patients who undergo surgery for nerve injuries experience complications from scar tissue and infections. Less than 50 percent of patients recover full motor and sensory function after a peripheral nerve injury. The Biodegradable Drug-Delivering Nerve Conduit aims to improve patient outcomes by regenerating nerves. A drug reservoir is attached to a biodegradable conduit that acts as a bridge between damaged and healthy nerves. It allows impulses to reach the damaged nerves and preserves muscle function. This technology also offers unique adaptability. It is able to release a variety of different proteins or small molecules and can also titrate drugs into a patient as necessary without a complete redesign of the technology.

**Features and Benefits**
- Facilitates rapid nerve healing and functional restoration of organs not offered by current nerve wraps.
- Provides controlled drug delivery and stability as conduits can degrade after a minimum of eight weeks.
- Drugs and elution rates can be modified without modifying or redesigning the device.

**Recent Publications**

**Inventor Profile**
Jayant Agarwal, M.D., Chief - Division of Plastic Surgery, School of Medicine
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**Technology Summary**
The Biodegradable Drug-Delivering Nerve Conduit is a novel bridge conduit with a biodegradable, drug-delivery system to connect healthy and damaged nerves while administering proteins or small molecules at controlled rates to an injury site.