

"A Smart Cervical Collar "

"Seeking industrial partners for co-development, production and marketing"

Preface

Cervical collars market is witnessing major shifts in trends in the healthcare sector. Earlier, the use of rigid cervical collars was widespread which were ideal in cases of accidents, wherein the spine is damaged and requires a center aligned positioned.

However, most cases of neck injuries today do not meet the criteria for the widespread adoption of rigid collars. Hence, many hospitals and healthcare associations today are shifting towards the use of soft collars instead of conventional and rigid C cervical collars.

The growing demand for these accounts for the rising cases of common injuries like neck pain or cervical spondylitis due to sedentary lifestyle, increase in elderly population and neck injuries in sports or defence.

Moreover, innovative new products in the cervical collars market are also expected to create significant opportunities for players. [Source: Biospace.com]

The Technology

A smart circuit connected with the shape memory alloy springs, providing a manual and automatic control of pressure between the collar and neck of the wearer for improved pain management and comfort

Value Proposition

- It uses piezo sensors for capturing the strain between neck and collar*
- It automatically adjusts pressure around the neck*
- It offers simple fabrication with shape memory alloys and microcontroller*
- The actuation is generated by using feedback mechanism*
- It reduces the effort of monitoring the correct wearing practice*

Industrial Utility

- Healthcare Industry*
- Defence Sector*
- Sports and fitness industry*

Intellectual Property

- Indian patent applied*

Market Size & Growth Projection

- The global cervical collars market size is expected to grow by USD 63.23 million, progressing at a CAGR of over 5% during 2019-2023. [Source: technavio]*
- The spinal cord injuries (SCIs) are sustained by more than 12,500 patients per year in the United States and more globally. Currently, over 200,000 people live with SCIs in the United States. [Source: Sogacot.org]*
- The export duty for cervical collar is levied by the government when the product is exported from India to other countries. [Source: Connect2india]*

Competition

- Technology has competitive edge in terms of automation for constant pain management, ease of operation and comfortable fabrication.*

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