

Catheter port for intrathecal and intracranial administration of chemotherapy - 2261

Published date: June 5, 2019

Technology description

Overview

Treatment of brain tumors with chemotherapy often requires drugs to be administered to the patient via intracranial or intrathecal routes. Currently marketed systems for intracranial/intrathecal drug administration require significant manipulation of the catheter after it is placed, which potentially poses a risk to the patient. This method of placement also poses a risk of losing the window of opportunity for connecting the drug port to the catheter.

In addition, current devices for intracranial/intrathecal drug administration requires the use of a silk tie or other method of external reinforcement to ensure that the catheter is properly secured to the reservoir. Developing a new delivery system that requires less manipulation would not only decrease the risk to the patient, but create an easier method for drug delivery.

Technology

Researchers at the University of Kentucky have developed a novel catheter port with a trocar that allows the catheter to attach directly to the port without the need for external reinforcement. This design requires significantly less manipulation of the catheter after it is placed, which reduces the risk of the catheter being pulled out of the ventricle during attachment to the drug reservoir.

Although this design is specifically designed for intracranial and intrathecal drug delivery, it could potentially be modified for other routes of administration as a new method of attaching the catheter to the drug reservoir.

Application area

Intracranial drug delivery

Intrathecal drug delivery

Advantages

Requires less manipulation for placement

Safer, poses less risk to the patient

Allows catheter to attach directly to drug reservoir

Does not require external reinforcement

Institution

[University of Kentucky](#)

联系我们



叶先生

电话 : 021-65679356

手机 : 13414935137

邮箱 : yeyingsheng@zf-ym.com