



## Understanding Catheter Tubes: Types, Uses, and Importance

Quril Dora\*

Department of Radiology, Columbia University, USA

### DESCRIPTION

Catheter tubes play a crucial role in modern healthcare, enabling various medical procedures and treatments that are essential for patient care. These flexible tubes are used to deliver or remove fluids from the body and are vital tools in a range of medical fields, including urology, cardiology, anesthesia, and critical care. In this article, we will explore the different types of catheter tubes, their uses, and their significance in medical practice. Foley catheters are one of the most common types of catheter tubes. They consist of a flexible tube with an inflatable balloon at one end and multiple drainage holes near the tip. The balloon is inflated once the catheter is inserted into the body to keep it securely in place. CVCs are inserted into a large vein in the neck, chest, or groin and are used to deliver medications, nutrition, or fluids directly into the central circulatory system. They are essential in critical care settings and for patients requiring long-term treatment. PIVCs are the most common type of intravenous catheters and are typically inserted into peripheral veins in the arms or legs. They are used for short-term administration of medications, fluids, or blood products. Nasogastric tubes are inserted through the nose and down the esophagus into the stomach. They are used for feeding, administering medications, or draining gastric contents. Urinary catheters are used to drain urine from the bladder in patients who are unable to void urine normally due to various medical conditions or surgical procedures. Catheter tubes are utilized to manage fluids within the body, including administering medications, nutrition, or blood products, and removing excess fluids or waste products. Urinary catheters are employed to assist with urinary retention, incontinence, or during surgical procedures involving the urinary tract. They play a critical role in ensuring adequate urine drainage and preventing complications. Certain catheters, such as central venous catheters,

enable continuous monitoring of various physiological parameters and facilitate diagnostic procedures like measuring blood pressure, central venous oxygen saturation, and cardiac output. Catheters are used for administering localized therapies, such as delivering chemotherapy directly into a specific area, performing cardiac ablation, or draining abscesses. During surgeries, catheter tubes are used to deliver anesthetics, maintain airway patency, and manage various bodily functions. Catheter tubes contribute to improved patient care by providing a means to deliver essential medications and fluids, aid in diagnostic procedures, and manage specific medical conditions. The use of catheter tubes can help shorten hospital stays for patients by ensuring efficient management of fluids and providing necessary treatments directly. Catheters often reduce the need for repeated invasive procedures, providing a less intrusive way to administer treatments and monitor patients. Catheter tubes allow for precise and localized administration of medications and therapies, leading to more effective treatment outcomes with reduced systemic side effects. In conclusion, catheter tubes are indispensable tools in modern healthcare, enabling a wide array of medical interventions and therapies. Understanding the different types of catheters and their applications is crucial for healthcare professionals to provide optimal care to their patients. As medical technology continues to advance, catheter designs and applications will likely evolve, further enhancing patient care and medical outcomes.

### ACKNOWLEDGEMENT

None.

### CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

<b>Received:</b>	30-August-2023	<b>Manuscript No:</b>	IPJIIR-23-17984
<b>Editor assigned:</b>	01-September-2023	<b>PreQC No:</b>	IPJIIR-23-17984 (PQ)
<b>Reviewed:</b>	15-September-2023	<b>QC No:</b>	IPJIIR-23-17984
<b>Revised:</b>	20-September-2023	<b>Manuscript No:</b>	IPJIIR-23-17984 (R)
<b>Published:</b>	27-September-2023	<b>DOI:</b>	10.21767/2471-8564.6.3.23

**Corresponding author** Quril Dora, Department of Radiology, Columbia University, USA, E-mail: qurildora@gmail.com

**Citation** Dora Q (2023) Understanding Catheter Tubes: Types, Uses, and Importance. *J Imaging Interv Radiol.* 6:23.

**Copyright** © 2023 Dora Q. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.