Short and long-term catheter materials

What are short-term catheters made from?

* Short-term catheters are traditionally made from plastic (PVC), latex rubber or polytetrafluoroethylene PTFE (Teflon) coated latex

* Latex rubber catheters without a coating are currently unpopular because of latex allergy, potential discomfort due to high surface friction and they are prone to rapid encrustation by mineral deposits. Latex allergic reactions are also implicated in the development of urethritis and urethral stricture \(^1,2,3,4,5,6\) or anaphylaxis \(^7\)

* PTFE coated catheters may also be used for medium term use (up to 28 days)

* Materials that are commonly used for long-term use may also be used (such as silver alloy coated materials) but they are a more expensive option

Would a short-term catheter be suitable for me?

* A health professional will advise you if short-term catheterisation is suitable for you, but for example short-term catheters are \textit{commonly} put in:

* During surgical procedures and post-operative care

* For accurate monitoring of urine output in acute illness

* Instillation of medication directly into the bladder

* For relief or acute or chronic urinary retention

What are long-term catheters made from?

* Long-term catheters are ones which are expected to stay in for more than 28 days (and are changed regularly as part of a care strategy)

* They can be made from silicone, silicone-elastomer coated latex and hydrophilic polymer coated latex, these materials are known to cause the least friction and tissue reaction \(^8\). They are also less vulnerable to rapid colonisation by bacteria and encrusting by mineral deposits.

* Silver-alloy coated catheters (anti-microbial) and anti-biotic or antiseptic impregnated ones are relatively new to the market so although they have been tested for safety, little is known about their long-term performance.

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They are designed to reduce/prevent catheter-associated urinary tract infection (CAUTI) and although there is some research evidence to suggest that silver-alloy coated catheters prevent asymptomatic bacteriuria (this is bacteria that is detectable in a sample of urine during laboratory testing but has not produced any signs of illness in the person themselves) in people using them for less than 14 days. The relationship between this and developing a symptomatic CAUTI (i.e. the person becoming unwell and reporting symptoms) is not clear, further research is needed in this area.

Would a long-term catheter be suitable for me?

A health professional will advise you if a long-term catheter is suitable for you, for example long-term catheters are commonly put in to help people who have:

- Bladder outlet obstruction (BOO), for people who are waiting for surgical relief
- Chronic retention, often as a result of neurological injury or disease (where intermittent catheterisation is not possible or unsatisfactory)
- Infected pressure ulcers or skin breakdown that is affected by the presence of urine
- Urinary incontinence that hasn’t improved with treatment and all other products have been found to be unsatisfactory, (as a last resort only)

Evidence


