

Original article

## Prevention of kinking in percutaneous tubes

### ABSTRACT

**Introduction** Percutaneous tubes (PTs) allow permanent or temporary drainage or relieve obstruction caused by blockages or abnormal narrowing of openings or ducts. There is risk of PT kinking due to rotation and bending of the soft tube at the distal end during movement. Despite anchoring and dressing, indentation of the tubing occurrence results in impeded flow of fluid that may lead to infection risk. Aside to discomfort and pain, patients will likely require medical intervention and longer hospital admission. An average of 9–10 cases per month of PT damage were reported in our department.

**Aims** To explore solutions to minimise the incidence of PT damage and reduce the occurrence of PT kinking.

**Methods** A quality improvement (QI) team conducted root cause analysis to identify causes for the prevention and management of PT kinking. A modified fishbone framework identified root causes and possible interventions. The number of kinking in PTs was monitored.

**Results** Lack of training in staff to manage PT, the absence of standardised way of dressing, and the soft material-based tube were three major causes identified. Intensive education with a training video for the nurses and a standardised method of dressing application reference guide over the PT were initiated. A non skin-irritant conformable gadget was applied to protect the PT. The incidence of PT kinking dropped within the first month of implementation of the solution.

**Conclusion** Patients with long-term PTs/catheters can benefit from the use of an inexpensive efficacious protector to prevent damage to their PTs.

**Keywords** tube care, catheter care, tube protector, percutaneous

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### Type of Study

Type of Study: Qualitative or Quantitative

Level of Evidence: (list level of evidence)

Methodology: (list methodology)

### Credibility Factors

- Factor 1 (list factor here)
- Factor 2 (list factor here)
- Factor 3 (list factor here)
- Etc.

### Summary of Findings

- Summary of the type of study
- Summary of credibility factors: How credible is the article?
- Summary of the importance of the content to your selected diagnosis
- Summary of the ability to apply the content to your current workplace or patient population

### Article Link

- Include link to article here.

### Reference

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