

Reflection on Tube Feeding placement

The Tube Feeding placement article discusses how blind tube placement has increased chances of lung and oesophageal displacement which can lead to a wide variety of complications such as aspiration pneumonia, pneumothorax, feeding delays and even death. The authors objective during the study was to validate the accuracy of a guide that could be used to train new operators on the usage of direct vision-guided tube placement.

I always considered NG tube feeding to be a complex topic when I was studying it during one of my Bachelor courses. It most certainly is complex but that goes for basically every medical process as it has a direct or indirect influence on our body. It's a topic that confused me a lot which was probably due to the lack of video simulations and other visual aids at my disposal. I never studied the type of placement techniques, tube tip verification methods, and securement approaches which I feel is necessary to understand what I did actually study which was the process of creating enteral feeding solutions.

There were several important things I learned during my read through of the article and by watching the simulation video. One thing that surprised me was that acquiring ethics approval isn't necessary if a study is categorized as a "quality improvement study". I was always under the assumption that ethics approval is mandatory for every type of research study. Another thing that struck me was the amount training needed to be eligible for IRIS tube placement. Direct vision requires expert-level training to safely interpret the guidance. This would require the operators to be experts on interpretation of anatomical characteristics which could be challenging.

The video does a great job at showing the entire preparation, insertion, and verification process without prolonging it. As someone who understands and retains information better with visual aids, watching the nurse insert the tube, secure it properly and confirming the tube's position by taking the gastric aspirate in a 60mL syringe and checking its pH was very fascinating. This video helped clarify the gold standard for placement techniques, tube tip verification, and securement.

One thing I found interesting while reading the article was how images of the various organs were captured during tube placement and how the anatomy of various organs (nose, pharynx, respiratory tract and stomach etc.). was identified. For example, the research article mentions that entry into the pharynx is seen as *pale mucosa with blood vessels that blanch on impact* and the stomach is first seen as a *cavernous space* with the mucosa appearing as *cobbled* large folds. Having expert knowledge on the anatomy of these organs and being able to differentiate organ boundaries and identify where the tube is positioned in real time will greatly help prevent NG tube misplacement.

Overall, both the article and simulation video on NG tube placement were very informative and comprehensive. I had little difficulty understanding the information in the research study and ended up learning a lot of things I had no prior knowledge of. However, I feel as though I learned more from the simulation video since audio and visual aids help me better understand complex topics. The feeding tube placement resources provided by the ASPEN were very helpful and included some fascinating videos such as the *Pediatric Nasogastric Tube Placement and Verification* which first showed a simulation of NG tube placement in babies and then showed how it was done on an actual infant in a hospital setting.