Amjed Eljaili, OMICS J Radiol 2017, 6:4(Suppl)
DOI: 10.4172/2167-7964-C1-013

Chest x-ray Confirmation of Safe Nasogastric Tube placement in the intensive care unit, Ysbyty Gwynedd

Amjed Eljaili
Ysbyty Gwynedd, United Kingdom

Retrospective study involved data collection of 50 patients were audited over two-months period during 2016, to assess the quality and the adequacy of the 50 consecutive chest radiograph for confirming NG tube position. The patient's information was obtained via using radiology information system for radiology reports/requests, that has included checking out 30 Ryle's tubes(Non-radio-opaque) and 20 fine bore.

The study was carried out to,

1. To audit our compliance in Ysbyty Gwynedd Hospital, ICU, in adherence to the RCR-NPSA/2011/PSA002
2. To improve the optimization of chest radiographic imaging for checking NG tube position.

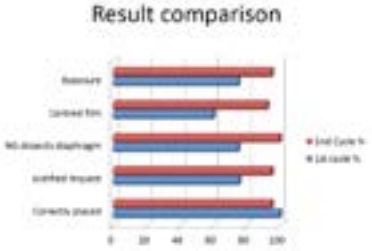
NPSA and RCR Standards Guidelines:

1. The exposure of the x-ray is adjusted to allow the nasogastric tube to be visible to the bottom of the image.
2. The x-ray is centred lower than would normally be appropriate for a chest x-ray so that it shows the abdomen as far as possible below the diaphragm.
3. The x-ray must show the bottom of both hemi-diaphragms in the midline.
4. If the tube is misplaced with the tip in for example the bronchus, the tube should be removed.
5. The Radiology request form must be justified and rationalized.

Result and Conclusion:

Result of the first cycle (pre-intervention)	Result of the second cycle (post-intervention)
1. Justified request: target met in 72.5% 2. Exposure of the film: target met in 75% 3. Centred Film: Target met in 60% 4. visible hemi-diaphragms: target met in 75% 5. Correctly placed NG tube: target met 100% 6. Exposure: target met in 95% 7. Centred Film: Target met in 92.5 8. visible hemi-diaphragms: target met in 100% 9. Correctly placed NG tube: 95%	1. Justified request: target met in 95%. 2. Exposure: target met in 95%. 3. Centred Film: Target met in 92.5. 4. visible hemi-diaphragms: target met in 100%. 5. Correctly placed NG tube: 95%.

Image : NPSA report of harm and death secondary to usage of misplaced NG feeding tube:



Checking method where error occurred:	Total number of reported incidents	Number of reported deaths (out of total)
X-ray misinterpretation	45	12
Fed despite aspirate tested as pH 6-8(existing advice ignored)	7	2
Fed after apparently obtaining pH 1-5.5	9	1
Water instilled down nasogastric tube before testing pH (i.e. existing advice ignored)	1	0
Not checked at all	9	1
Apparent migration after initially correct placement (e.g. after suction)	8	1
Bubble test	1	0
No information obtained on checking method used: other	17	4
Visual appearance of aspirate	1	0
Total	100	21

Biography

Amjed Eljaili, MBBS, October 2010, University of Al-Zaiem Al-Azhari, Sudan, currently practicing in UK,Ysbyty Gwynedd, BCUHB, Intensive care unit, Surgical department Dr Eljaili has attended several academic meetings regionally and nationally also he has participated in various national work-shops,congress, participation and membership with British institute of Radiology, United Kingdom.

amjed.eljaili13@hotmail.com

Notes: