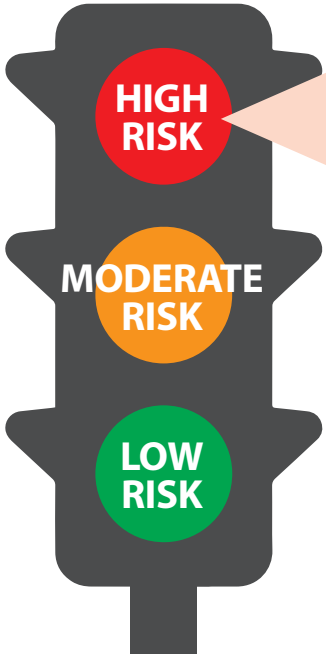
Safe Patient Selection for PEG (percutaneous endoscopic gastrostomy) in MND (motor neurone disease) MND gastrostomy pathway development

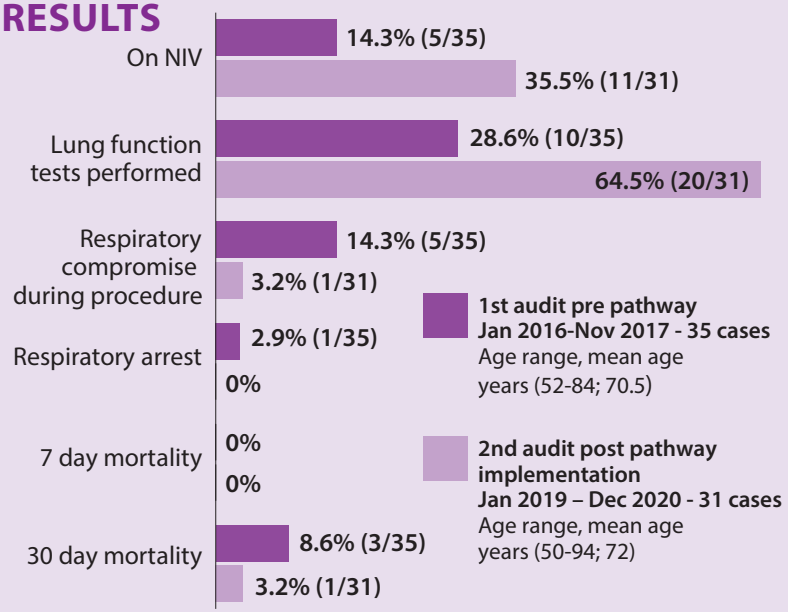
BACKGROUND

- Patients with MND undergoing PEG insertion are at high risk of respiratory complications.[1]
- The James Cook University Hospital endoscopy unit receives relatively large numbers of PEG referrals for MND patients due to the presence of on-site specialist MND services.
- Review was prompted after a patient suffered a near death due to intra-procedural respiratory arrest.
- Development and implementation of an MND gastrostomy assessment pathway using a **traffic light system** to stratify each MND patient's level of respiratory risk for PEG insertion.



- TNE (transnasal endoscopy) unsedated, seated push PEG technique.[2]
- Dedicated gastroenterologist consultant list.
- Non-invasive ventilation available during and post procedure.
- MND specialist nurse present during procedure.
- Standardised lung function tests within three weeks of procedure

RESULTS



METHOD

- MDT working group set up to review and evaluate current service pathway, and evidence base[1,2,3]
- Retrospective review of all patients with MND undergoing PEG comparing outcomes pre and post gastrostomy pathway implementation.

DISCUSSION AND RECOMMENDATION

- Risk reduction by improvement in patient selection and peri-procedural safety identified as paramount.
- Local protocol was revised and the MND gastrostomy pathway was developed and implemented to identify key actions required according to the individual patient's pre-procedure stratified level of risk, so that suitable precautions could be taken to ensure maximum safety. To view pathway visit www.southtees.nhs.uk/content/uploads/MND-gastrostomy-assessment-pathway.pdf
- Audit results indicate a reduction in respiratory compromise and mortality rates. Therefore the ongoing use of the **traffic light system** is recommended using the TNE technique in high risk MND patients.

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REFERENCES

1) National Institute for health and Clinical Excellence (NICE) (Feb 2016) Motor neurone disease: assessment and management. London. NICE. NG42

2) McCulloch A et al. Nasal unsedated seated percutaneous endoscopic gastrostomy (nuPEG): a safe and effective technique for percutaneous endoscopic gastrostomy placement in high- risk candidates. Frontline Gastroenterology 2017; (0)1-5

3) ProGas Study Group (2015) Gastrostomy in patients with amyotrophic lateral sclerosis (ProGas): a prospective cohort study. Lancet Neurol. 14: 702-709.