CAUGHT RED HANDED- CONGO STAINING IN THE OROPHARYNX

Editor,

A 74-year-old retired mechanic and never-smoker presented with a two-month history of hoarseness and weight loss. On examination he was found to have a large right-sided oropharyngeal mass extending across the soft palate with an associated ipsilateral neck gland.

Contrast enhanced computed tomography (CT) showed a 4x3x6cm mass extending from the hard palate to the superior border of the hyoid bone with no infiltration. It was contiguous, infiltrated the soft palate and bilateral level 2 lymphadenopathy was noted.

Fine needle aspiration of the neck node showed abundant amorphous material which was representative of amyloid on Congo red stain and the washings showed polyclonal population on light chain stain—characteristic of amyloidosis. PET CT confirmed uptake in the oropharynx but showed nil else in keeping with systemic amyloidosis. (Fig 1)

This patient was managed jointly by ENT and the haematologists who commenced a short course of steroids with good symptomatic effect and by the otolaryngologists who performed carbon dioxide laser resection. A pre-operative tracheostomy under local anaesthetic and embolisation of the external carotid artery was performed as substantial bleeding was expected due to the rich blood supply and dense protein matrix in amyloid lesions, which prevents constriction of the blood vessels.

To date there has been no re-occurrence of the disease though some is expected, as full excision was not possible due to the location of the deposit. This patient remains under regular follow by the otolaryngologists, the haematologists and the National Amyloid center.

DIAGNOSIS

The diagnosis of amyloidosis is made by a combination of clinical symptoms and tissue biopsy to establish a definitive diagnosis. Bennhold introduced the Congo red stain in 1922 and showed the characteristic red staining of amyloid in normal light. (Fig 2) Apple-green birefringence with polarised light microscopy, however, is the gold standard for diagnosis. (Fig 3)

IMAGING

Computed Tomography (CT) and Magnetic resonance imaging (MRI) are useful to assist in surgical approach but are non-specific for amyloidosis. The presence of giant cells in localised amyloidosis enables (18) F-fluorodeoxyglucose (FDG) positron emission tomography/ computed tomography (PET/CT) to be used in the differentiation between systemic and localised disease. Scintigraphy following administration of radio-labelled serum amyloid P component (SAP) is a specific imaging technique which enables quantification of amyloid deposits. This investigation is only available in a few centres in the United Kingdom including the National Amyloidosis Centre.

DISCUSSION

Amyloidosis is a heterogeneous group of diseases that can present with diverse symptoms according to the predominant site(s) of protein deposition. Although a rare disease, is not
uncommon, with head and neck involvement in 19% of cases.² It is important differential diagnosis for oropharyngeal masses as the management and prognosis varies significantly from malignant disease.

Robbie Stewart, Robin Adair.

ENT Department, Ulster Hospital, Upper Newtownards Road, Dundonald BT16 1RH
E-mail: robbieastewart23@gmail.com

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FOUNDATION DOCTORS’ AUDITS: EFFECTIVE OR NOT?

Editor,

The UK Foundation Programme (FP) curriculum recommends that Foundation doctors (FD) develop experience in 'managing, analysing and presenting at least one quality improvement project and using the results to improve patient care'. While the Maltese FP follows the UKFP recommendations, little emphasis is placed on completion of the audit cycle. The authors devised a questionnaire to assess the proportion of audits performed by FDs at Mater Dei Hospital (MDH) that completed the audit cycle, implementing changes in clinical practice.

METHODS

All audits registered on the Maltese FP audit register between January 2012 and August 2015 were included in the study: a total of 110 projects. The questionnaire was forwarded to the main author of each registered project by electronic mail, and responses collected over 6 months.

RESULTS

57 questionnaires were completed (52%). Most FD embarked on an audit so as to influence practice (79%) or improve the curriculum vitae (72%). 66.6% of respondents felt satisfied with the outcome of their project, while 71% felt supported in performing the audit. 77% of respondents felt encouraged to present their findings. Only 5.2% of audits reached the final, re-audit stage of the audit cycle. The most common reasons for failing to complete the audit loop were time limitations (46.9%), administrative difficulties (25%) and a move to a different department (50%). Of the 94.8% of respondents who failed to complete the audit cycle, only 8.9% handed over their work to a colleague to complete.

DISCUSSION

Audits done by FD in Malta were rarely completed, with only 5.2% of the registered audits reaching the re-audit stage. This compares with 24% in a similar study in London². 21% of junior doctors from Leeds perceived their audit projects to have a negative effect on the department³ the degree of support from audit staff, and the perceived value of the resulting audits. This contrasts with our data showing a relatively high rate of satisfaction with the outcome of the audits performed, regardless of the stage of the audit cycle that was reached. This could indicate a poor appreciation of the potential for audit to influence practice. Also sobering is the fact that of those failing to complete the audit cycle, 91% did not plan to handover their results to a colleague to complete the cycle, and almost 50% had no plans to complete the audit. In these cases, it appears that potentially influential data has gone to waste.

The authors propose a handover system for FD to pass on their collected data for a colleague to act upon. This could avoid useful and hard-earned data from going to waste, and lead to improvements in practice. Encouraging multiple FD to work as a team on a single project can also help them overcome time limitations⁴. FD need to be made aware of the value of a completed audit: part of the responsibility for this falls on Educational Supervisors within the FP. Helping junior doctors to contribute by implementing change will motivate them and encourage them to undertake further audit projects in the future.

Paul Torpiano, Karen Sapiano, Pierre Ellul
Mater Dei Hospital, Malta
E-mail: paul.torpiano@gov.mt

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CENTRIFUGATION IN GP PRACTICES - CAN IT IMPROVE DIAGNOSTIC EFFICIENCY?

Editor

Potassium (K) is one of the most frequently tested analytes in the biochemistry laboratory. Because of its critical role in both cellular and electrical function it is vital that hypo and hyperkalaemia are promptly communicated to clinicians. A delay in sample centrifugation is a common cause of pseudohyperkalaemia. The follow up of pseudohyperkalaemia consumes valuable health care resources and can result in patient care delays.

The purpose of this trial of sample centrifugation at source was to verify the positive impact on the quality of potassium results (ie the number of samples requiring follow-up) reported within the literature¹ and measure user satisfaction.