

MANAGEMENT OF SUSPECTED THYROGLOSSAL DUCT REMNANTS

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Aim: To evaluate the management of anterior midline neck swellings at our institution by establishing 1) whether a pre-operative ultrasound scan (USS) of the neck was appropriately requested, performed and reported; 2) whether a Sistrunk procedure was performed; 3) the rate of thyroglossal duct remnant recurrence following simple excision vs Sistrunk procedure.

Methods: Retrospective study. Patients who underwent surgery for an anterior midline neck swelling from 2000-2015 were identified using the clinical coding system. Pathology results, radiology reports and electronic medical records were analysed. Recurrence rates were analysed in a 2x2 contingency table.

Main results: 227 patients were identified (115 male, 112 female). 169 (74%) had a pre-operative USS. 64 (38%) scan requests specifically enquired about the presence of a normal thyroid gland distinct from the cyst. 133 (79%) reports commented on the thyroid gland; this increased to 92% when requests were specific. 175 (77%) patients had a Sistrunk procedure while 48 (21%) underwent simple excision. Follow-up data was available for 160 patients; 20 following a simple excision and 140 following a Sistrunk procedure. Recurrence was significantly more likely following simple cyst excision when compared to Sistrunk procedure (65% versus 8.6%) (Chi-squared $P < 0.0001$). Of the 25 thyroglossal duct remnant recurrences 9 (36%) had either had inconclusive or alternative histopathological diagnosis at first operation.

Conclusion: A pre-operative USS should be performed in all patients with an anterior midline neck swelling. Appropriate requesting increases the likelihood of a report containing confirmation of a normal thyroid gland distinct from the cyst. All patients undergoing excision of an anterior midline neck swelling should have a Sistrunk procedure. The surgeon cannot reliably differentiate a dermoid cyst from a thyroglossal duct remnant at time of operation.

		Hyoid		
		Y	N	
Recurrence	Y	12	13	25
	N	128	7	135
		140	20	

Figure 1 Recurrence of thyroglossal duct remnants in patients following a Sistrunk procedure vs simple cyst excision. Chi-square 2-tailed P -value 0.0001