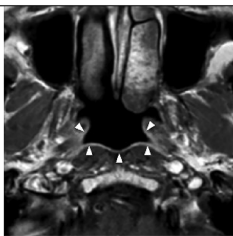
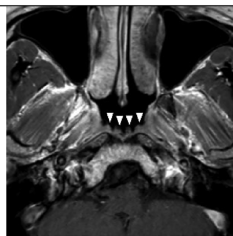
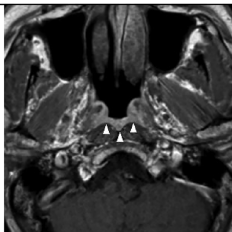
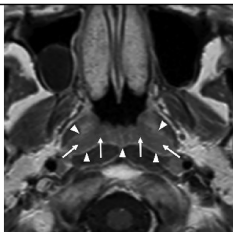
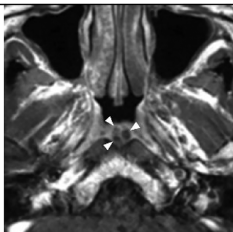
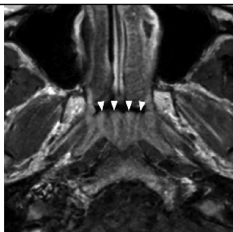
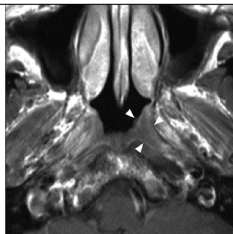
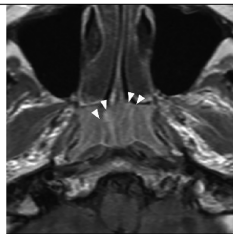
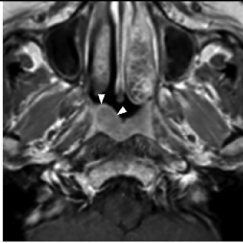
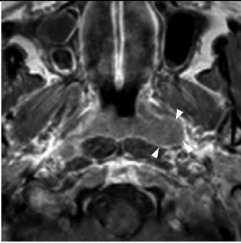
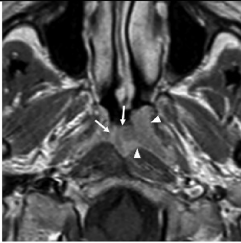
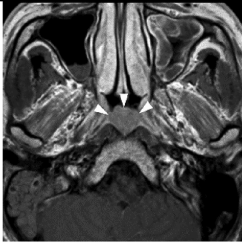


ON-LINE FIG 1. Flow chart showing patients who were investigated for suspected NPC but did not have head and neck cancer.

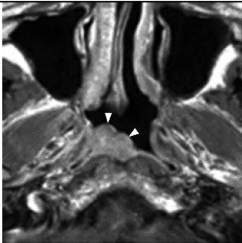
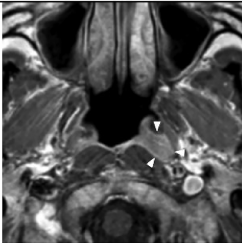
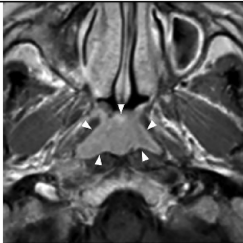

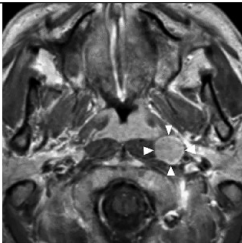
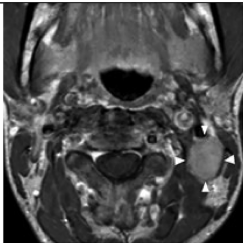
Grade 1. Normal			
			
Thin wall 1-3mm (arrowheads)	Vestigial adenoid (arrowheads)		
Grade 2. Probably benign hyperplasia			
			
Diffuse symmetric wall thickening >3mm with homogeneous enhancement (arrowheads)	Diffuse symmetric wall thickening >3mm with thin line of enhancement (arrowheads) and superficial band of lower enhancement (arrows)	Adenoid composed almost entirely of multiple small cysts (arrowheads)	Adenoid with preserved symmetric contrast-enhancing septa perpendicular to the roof (arrowheads), separated by less enhancing columns (ie, striped appearance)
Grade 3. Intermediate			
			
Diffuse asymmetric wall thickening >3mm greater on the left side which is non-expansile (arrowheads)	Adenoid with internal distortion of contrast-enhancing septa (arrowheads)		

ON-LINE FIG 2. Axial contrast-enhanced T1-weighted images to illustrate the Chinese University of Hong Kong–modified MR imaging grading system for detection of NPC. Cysts do not contribute to grading of asymmetry or distortion of adenoidal septa, so reference to the T2-weighted images should be made when interpreting contrast-enhanced T1-weighted images in the modified grading system.



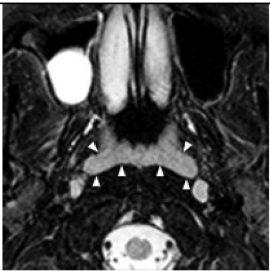
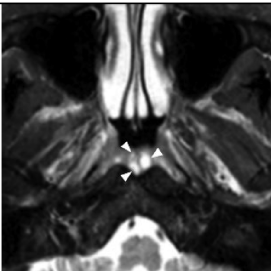
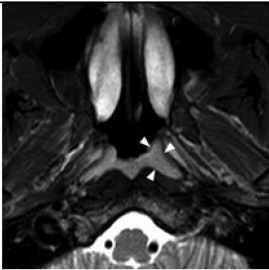
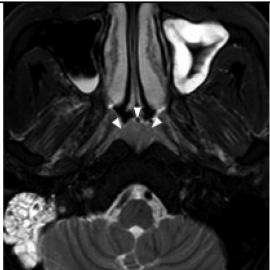
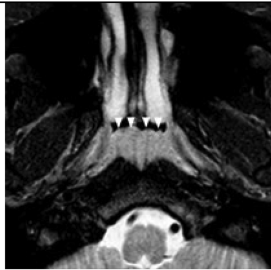
Grade 4. Suspicious of NPC

			
Diffuse asymmetric wall thickening >3mm with an expansile superficial margin on the right side (arrowheads)	Diffuse asymmetric wall thickening >3mm with an expansile deep margin on the left side (arrowheads)	Adenoid with external distortion of contrast-enhancing septa (arrows) by a mass in the left side of the roof (arrowheads)	Adenoid which is focal (arrowheads) with absent contrast-enhancing septa

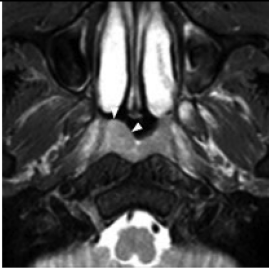
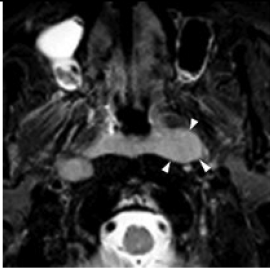
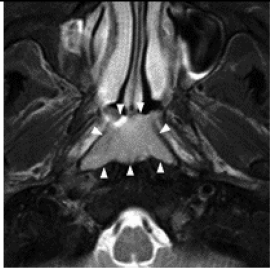
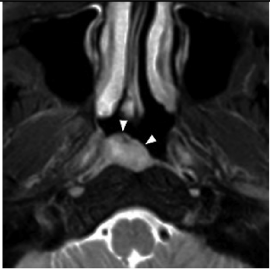
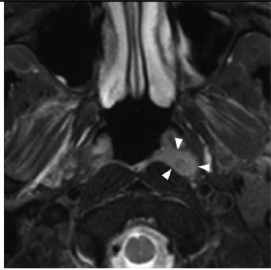
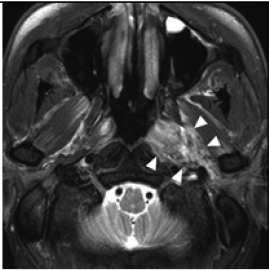
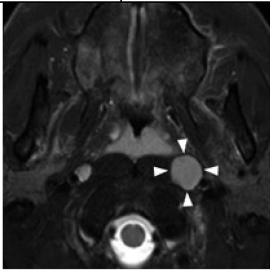

Grade 5. Probably NPC

		
Focal mass in the right side of the roof (arrowheads)	Focal mass in the left pharyngeal recess (arrowheads)	Adenoid filling the roof asymmetrically (arrowheads) with absent contrast-enhancing septa.
		
Spread outside the nasopharynx into the left retropharynx and parapharynx (arrowheads)	Metastatic retropharyngeal node (arrowheads)	Metastatic upper cervical node (arrowheads)

ON-LINE FIG 2. Continued

Grade 1. Normal		
		
Thin wall 1-3mm (arrowheads)		Vestigial adenoid (arrowheads)
Grade 2. Probably benign hyperplasia		
		
Diffuse symmetric wall thickening >3mm (arrowheads)		Adenoid composed almost entirely of multiple small cysts (arrowheads)
Grade 3. Intermediate		
		
Diffuse asymmetric wall thickening >3mm greater on the left side which is non- expansile (arrowheads)	Adenoid which is focal (arrowheads)	Adenoid filling the roof symmetrically (arrowheads)

ON-LINE FIG 3. Axial T2-weighted fat-suppressed images to illustrate the Chinese University of Hong Kong plain scan MR imaging grading system for detection of NPC. Cysts do not contribute to the grading of asymmetry or distortion of adenoidal septa.

Grade 4. Suspicious of NPC		
		
Diffuse asymmetric wall thickening >3mm with an expansile superficial margin on the right side (arrowheads)	Diffuse asymmetric wall thickening >3mm with an expansile deep margin on the left side (arrowheads)	Adenoid filling the roof asymmetrically (arrowheads)
Grade 5. Probably NPC		
		
Focal mass in the right side of the roof (arrowheads)	Focal mass in the left pharyngeal recess (arrowheads)	
		
Spread outside the nasopharynx into the left retropharynx and parapharynx (arrowheads)	Metastatic retropharyngeal node (arrowheads)	Metastatic upper cervical node (arrowheads)

ON-LINE FIG 3. Continued

On-line Table. Current grading system for the detection of NPC using a contrast-enhanced MR imaging protocol^a

MR Imaging Grading of the Nasopharynx	
MR imaging grade	MR imaging appearance
Grade 1: normal	Symmetric mucosa <3 mm thick with or without small retention cysts
Grade 2: low index of suspicion of NPC	Symmetric mucosa >3 mm thick with or without small retention cysts or a Thornwaldt cyst OR symmetric enlargement of the adenoid in the central roof and upper posterior wall with a striped appearance, with or without a smooth band of symmetric thickened mucosa extending down the posterior and lateral nasopharyngeal walls
Grade 3: high index of suspicion of NPC	Asymmetry between the right and left sides of the nasopharynx with a grade 1 or 2 appearance
Grade 4: NPC	Asymmetric mucosal thickening with homogeneous intermediate signal intensity on T2-weighted images and moderate contrast enhancement (relatively less than the normal mucosa) on T1-weighted images (without fat saturation), with or without extra-nasopharyngeal infiltration OR a focal homogeneous enhancing mass with or without extra-nasopharyngeal infiltration

^a Current MR imaging protocol: T2 and T1-weighted images without and with intravenous contrast enhancement.