Introduction
Ultrasound-guided fine needle aspiration (US-FNA) of thyroid nodules is one of the most commonly performed interventional procedures in our unit. Although the risks of the procedure are small, a non-diagnostic specimen may result in need for either repeat FNA or diagnostic surgical removal. This can cause additional strains on limited health resources and unnecessary mental stress on patients. Before 1st May 2014, there was no departmental policy on the number of needle passes recommended per nodule. Since then, we have implemented a universal two-needle passes approach for all thyroid FNAs in order to improve the diagnostic yield.

Objectives
To investigate the performance of US-guided FNA of thyroid nodules with two-needle passes by comparing the unsatisfactory sample rate before and after the implementation of universal two-needle passes approach.

Methodology
All consecutive patients who underwent US-FNA of thyroid nodules in 3-month periods from 1st Feb 2013 to 30th April 2013 (before implementation of two-needle pass approach, Group A) and from 1st May 2014 to 31st July 2014 (after implementation of two-needle pass approach, Group B) were compared. Their clinical and pathological information were reviewed. Pathology results were categorized into Category I- VI based on the Bethesda System of Reporting Thyroid Cytopathology. For Bethesda Cat Ia nodules (hemorrhagic cyst/cyst fluid only), ultrasound images were retrospectively reviewed by two radiologists. If the nodule was deemed to have insignificant solid component on USG images, the pathological diagnosis Cat Ia would
be considered compatible with US appearance and hence not unsatisfactory.

**Result**
354 patients with a total of 381 nodules biopsied were included (157 patients and 167 nodules in group A; 197 patients and 214 nodules in group B). There was no significant difference between both groups in terms of age and sex of patient, as well as size of nodule. Two-needle passes were performed in 5% of nodules in group A as compared with 100% in group B. Unsatisfactory sample rate was significantly lower in group B than in Group A (23.3% vs 13.6%, p=0.005). Adopting the universal two-needle passes approach improves the sample adequacy of US-guided FNA of thyroid nodules. A higher diagnostic yield may help to accelerate clinical management workflow, reduce clinical follow-up attendance and relieve patient anxiety.