“One-stop” head and neck clinic: does it make a difference?

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Abstracts

Objectives: To evaluate the efficacy of One Stop Head and Neck clinic in terms of costs, patient satisfaction and accuracy of diagnosis in patients with suspected head and neck lumps.

Methods: We conducted a prospective study of 277 patients attending the clinic over a period of 10 months. The clinical examination, Ultrasound scan, FNA, and cytology results were examined. Patient satisfaction was also assessed using a satisfaction questionnaire.

Results: Average cost of seeing a patient in this clinic was £78 compared to £56 for a normal clinic. 30% of patients were discharged on the first visit. Findings included: malignancy (17.3%), cysts (30.5%), Lymphoma (0.4%), salivary gland tumours (14.1%), Thyroid disease (11.6%), benign lymphoepithelial (42%) and no abnormality in (8%). 50% of patients had an FNA during the visit. 65% had inconclusive cytology results, 85.3% had an USS with 100% sensitivity in diagnosing malignancy. FNA results yield from 50% to 90% by using USS thus reducing the number of follow-up visits and the overall costs (£1432 annually). 67.9% of patients who returned the satisfaction questionnaire were confident that they were given a diagnosis on the day and 100% of them preferred the one stop clinic.

Conclusions: USS guided FNA increases the adequacy of cytology. One stop clinic results in better communication and more accurate diagnosis. Based on our experience, this service is cost effective in long term and brings higher patient satisfaction.

Introduction

In November 2004, National Institute for Clinical Excellence (NICE) in United Kingdom published a document on how head and neck lumps refers should be assessed. This document recommended that patients with persistent head and neck lumps should have rapid access referrals to a designated head & neck lumps clinic. If they were diagnosed with head & neck cancer, then they have to be managed by a Multi Disciplinary Team (MDT) if necessary. Previous studies have supported the value of an efficient assessment system for cancer patients. In addition to this, the positive role of ultrasound scan and Fine Needle Aspiration (FNA) was also highlighted in diagnosis of head and neck cancers. We studied the outcomes of all referrals to the “one-stop” head & neck lumps clinic at our centre in order to assess the efficacy of NICE guidelines. We also studied patient satisfaction and looked at the financial benefit of the service.

Methods

We studied the clinical data on all the cases which were referred to head & neck lumps clinic over a period of 10 months. The clinic included all suspected cases of head & neck cancer referred from community by general practitioners and also patients referred by other teams in the hospital. The “One-stop” head & neck lumps clinic consisted of 3 maxillofacial surgeons, 1 ENT surgeon, 1 radiologist, 1 oncologist, 1 pathologist and a pathology technician. This clinic was also supported with a number of nurses and administration staff.

Each patient was seen and examined by surgeons, then had an ultrasound scan of the lump together with an FNA. The ultrasound scan was reported immediately with the referring clinician in attendance if required. The pathologist then examined the slides and the results were documented on a special data form. The ultrasound scan and FNA results then were decided by the members of MDT. Once they reached a consensus on a patient’s diagnosis and management plan, it was discussed and explained to the patient. In order to assess patient satisfaction, a questionnaire was given to each patient at the end of their visit.

We used a hospital accountant for calculation of the cost of all new equipment needed for this service. The average cost of each head & neck lumps clinic was calculated for comparison with the normal ENT/maxillofacial surgery outpatient clinic session.

Results

We studied a total of 277 patients over a 10 months period. There were 154 females and 123 male patients. Average age of referred patients was 53 with an average age of patients with malignancy at 60. The average age of patients with a benign condition was 51. 224 patients were referred by general practitioners and 53 cases were referred by other specialties namely maxillofacial and ENT. 254 patients (95.3%) had an ultrasound scan. 17 patients (6.7%) were not scanned because there was no abnormality clinically. Ultrasound scan was 100% sensitive in diagnosis of malignancy. 130 patients had an FNA (95.2%) and 100% accurate at one-stop clinic appointment. 9 cases (6.8%) had fine needle cytology and 6 out of them were diagnosed with lymphoma after an open biopsy. The other 3 cases had metastatic cancer from breast, tonsil and an unknown primary. The adequacy of sample for diagnosis was 92.4% on first FNA.

The clinic resulted in diagnosis of 48 malignancies (17.3%), 10 cysts (3.5%), 15 lymphomas (5.4%), 30 benign salivary tumours (14.1%), 32 benign thyroid lumps (11.9%) and 16 benign lymphoepithelial (42%) and no abnormalities detected in 17 patients (6%). Overall, 82 (30%) patients were discharged on the first visit, 2 out of three returned (2.4%), but were again reassured and discharged.

58 patients returned a satisfaction survey at the end of the clinic and all 58 (100%) preferred to attend a one-stop clinic rather than individual appointments. 51 patients (87.6%) confirmed they were given a diagnosis at the end of their visit. When asked if we trusted the result in conclusion of three out of four patients (75%) versus 78% on the “one-stop” head & neck clinic. Capital cost for a microscope to remain in the clinic was £8000 and the cost of a portable ultrasound scanner was £20000.

Conclusions

Our study showed a significant improvement in the adequacy of FNA in “one-stop” clinic compared to previous results before commencement of this service. The FNA results yield from 50% to 90% litre reducing the need for a repeat visit and the reduction in the number of review appointments. The possible reasons for this could be ultrasound guided FNA, more experienced clinicians performing FNAs and better communication between the referring clinician and radiologist.

We presented our patients during setting the “one-stop” head & neck lumps clinic included allocation of a suitable clinical space where participants could work alongside or in adjacent clinical rooms and difficulty, in allocation of session time to clinicians with full time availability. Holiday cover for participating clinicians and radiologist and cytologist were also required. From financial point of view, the decrease in the number of follow up appointments resulted in an annual saving of £14,122 for the hospital. This was also cost effective in terms of three outpatient visits (no one in 30% of cases. This shows that despite the initial high set up costs, this service is cost effective in long term.

All the patients who participated in patient satisfaction survey expressed their preference to attend a “one-stop” clinic rather than several visits to hospital. 97.9% of the participating patients confirmed that they were given a diagnosis at the end of the clinic and 24.1% commented that more information regarding a biopsy could have been given.

We found that a “one-stop” head & neck lumps clinic increases the accuracy of diagnosis of cancer and is cost effective in long term. Patient satisfaction is also higher with this type of clinic because of ease of attendance, accuracy and speed of diagnosis. One stop clinic results in better communication and more accurate diagnosis. Based on our experience, this service is cost effective in long term and brings higher patient satisfaction.

References

