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Use of nurse-led telephone follow-up as a sole method of assessing patients after nasal surgery

Paul Sooby, Paul Kirkland East Sussex Healthcare NHS Trust, UK

Abstract

Patients undergoing nasal surgery have historically been routinely followed up in consultant led clinics some months after surgery. It has been noted that a significant proportion of these patients either did not attend these appointments or did not require them, impacting on the efficiency of ENT outpatient clinics. A quality improvement project was undertaken to assess this problem and to propose a new patient pathway whereby patients are contacted by ENT nursing staff by telephone three months following surgery. During these telephone conversations only 9.5% of patients requested outpatient follow-up and all of these patients were discharged upon their follow-up. The project demonstrates that nurse-led follow up is an efficient, effective and safe way of managing patient care post-nasal surgery.

Problem

Septoplasty and functional endoscopic sinus surgery (FESS) are common surgical procedures within ear, nose and throat surgery (ENT). Most commonly these procedures are performed for nasal blockage and chronic sinus disease. However, the follow-up following these procedures is far more variable. There is evidence to state that routine follow-up following an uncomplicated septoplasty and other nasal surgery is not necessary. However, many surgeons and centres across the United Kingdom and indeed internationally still use routine follow-up practices following nasal surgery. It has been proposed that this is because many surgeons are uncomfortable not receiving feedback that the surgery performed has been successful.

Previously all patients who underwent nasal surgery at the Conquest hospital in Hastings, received a consultant follow-up appointment three months after surgery. However, at follow up it was noted that a significant number of patients did not attend their follow up appointment or did not require follow up as they were asymptomatic at this time. This clearly impacts on the efficiency of the ENT outpatient service as well as imposing significant financial impositions to the ENT department.

Background

It was proposed by Murthy et al, that routine follow up following uncomplicated nasal surgery (in particularly septoplasty) was unnecessary. This was largely due to the high patient satisfaction rates following surgery, in excess of 80%. Nurse-led follow up has been successfully used in a number of other specialties and indeed to assess the success of other surgical procedures. Both septoplasty and FESS have been successfully followed up previously by experienced ENT nurses.

Nurse led follow up projects has been shown to be cost-effective, save surgeons time and also can be beneficial to patients in terms

of convenience (no need for travel to hospital/childcare arrangements). It has been estimated that the difference in cost between consultant/nurse-led telephone follow up is approximately £55.96 per patient. However, this does not take into account the benefits in clinic appointment efficiency improving waiting times for the trust.

Telephone follow up have also been used in other specialties for the monitoring of chronic diseases. A previous project focusing on inflammatory bowel disease patients has shown that nurse-led annual follow ups and an acute advice line have high patient satisfaction rates (greater than 85%). This project and others were also found to be feasible to implement but did face some challenges in demonstrating significant cost savings (due to fixed reimbursement rates). It was also recommended that this follow-up pathway could be used as an "alternative rather than an absolute replacement".

Baseline measurement

A retrospective audit was conducted to investigate the outcomes of all patients undergoing nasal surgery at the Conquest hospital over the 6 months between August 2012 and February 2013. 41 patients underwent nasal surgery, 71% of these patients were either discharged at follow-up or did not attend the follow up appointment. Of the remaining 29%, 66% were discharged at the second followup appointment with no significant treatment being initiated. From this initial audit, it was decided that there was a significant opportunity to improve the efficiency of the department.

Design

A new patient pathway was designed where patients listed for nasal surgery would not be routinely followed up by a consultant, but by a senior ENT clinic nurse (an ENT sister or matron) by telephone at home after three months. During this telephone call, the nurse would complete a proforma where the patient would be assessed for nasal symptoms, perceived success of surgery, ongoing issues and if it was felt that further follow up was required, a consultant appointment would be made.

Strategy

PDSA - Cycle one

A nurse-led telephone follow-up protocol was developed and initiated in April 2013. All patients undergoing nasal surgery (septoplasty or FESS) were phoned at home by a senior ENT nurse three months post-operatively. Patients were asked about nasal symptoms (blockage, discharge) post-operatively, whether symptoms had resolved, whether they had suffered any problems during the three months and if these were continuing, whether they wished to have a follow up appointment, and finally if they were happy to be discharged from care. Also if patients had undergone a polypectomy, they were asked if they were still using steroids. This information is recorded on a set proforma sheet for the medical records.

To ensure patient safety, patients were given an information leaflet at the time of consent detailing this process. Patients were also given contact details for the ENT clinical team should they feel a follow-up appointment was required prior to the telephone call and were also informed that the telephone follow-up process would not hinder access to emergency help should it be required. If a patient was not contactable at the time of the phone call, a message was left for the patient and two further phone calls were made at week intervals. If the patient was not contactable at any of these three phone calls a letter of discharge was sent to the patient, but this letter did contain contact details for the ENT department should an appointment be required.

During the first cycle after 6 months, it was noted that the number of patient details being given to the nursing staff after an operation had been performed was minimal. It was felt that this was because surgeons were not informing the nursing staff that surgery had gone ahead. As a result, some follow up was performed later than intended as patients were identified upon monthly filing of operating lists.

To address this, during the monthly journal club the principles behind the project were re-affirmed to all members of the surgical team. Also, the pathway was altered so that at the time of booking the patient for surgery the nursing team would take details from the patient and place them in a file marked 'awaiting surgery' and then once surgery was performed move the details into a file marked 'awaiting follow-up'. This process was cross-checked at a weekly meeting with the surgeons. This increased the number of patients being entered into the telephone audit by 2.3 times.

PDSA – Cycle Two

While much improved, it was still noted that some patients were not being followed up in the correct time frames due to changes in planned operation times (e.g. cancellations, late additions to lists etc). A new system was employed where upon each day when an

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ENT surgeon was operating, the senior ENT nurse would routinely receive a copy of the theatre list which would then be crosschecked with the operating surgeon as to what operations were performed. This also gave the surgeon the opportunity to inform nursing staff that a patient would be removed from the follow up programme because of unexpectedly difficult surgery. This further improved the number of patients completing the new patient pathway.

A six month prospective audit of the nurse-led discharge forms was carried out following the PDSA cycle two. This ran from October 2013 to March 2014.

Results

During the six month period 65 patients underwent nasal surgery at the Conquest hospital. Of these, 3 were excluded as the operating surgeon asked for a follow up appointment to be made due to a difficult surgery. 71% (n=44) of patients contacted three months following surgery were discharged at the point of the telephone call as surgery had been successful. This included three patients who were not contactable and a letter of discharge was posted. 18% (n=11) of patients re-presented to ENT prior to the three month phone call. This included 2 patients who presented as emergencies, each with a septal haematoma post-septoplasty. The remaining 9 patients were all discharged at the follow-up appointment that was made. 11% (8) of patients who were contacted at three months requested further follow up as the patient felt the surgery had been unsuccessful. Two patients who were re-appointed did not attend the follow up appointment and were sent a letter of discharge. Thus only 9.5% of patients who were contacted at three months by telephone follow up required a follow-up appointment. Of these patients, none were found to have a significant complication and were all discharged at the time of re-appointment. No patients were re-listed for second look procedures or supplementary nasal procedures.

Of the patients requiring follow-up appointments (either early or post-telephone call) there was no significant difference between: the type of operation performed (septoplasty or FESS), consultants performing the procedure or the grade of doctor performing the procedure. The most common reason of the 17 patients who required reappointment was non-resolution of symptoms that existed prior to surgery. Of the patients discharged, none represented to ENT services over a year long period.

See supplementary file: ds5051.ppt - "Run Chart"

Lessons and limitations

The majority of patients we reviewed within this project were able to be discharged without further consultant follow up. This project demonstrated that not only is nurse-led follow up effective, but it is also safe as no patients re-presented to ENT services. This nurseled follow-up system has freed up a significant number of outpatient appointments in consultant led clinics, which has improved the efficiency of the department and improved clinic waiting list times.

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This project has also proved to be of significant monetary value to department, saving $\pounds 106.50$ per consultant appointment re-utilised.

The project also appeared to be safe for patients, as with our safety netting measures we were able to identify two potentially serious complications (septal haematoma). Also patients who were struggling with post-operative symptoms within the first three months were re-appointed in a timely fashion and reviewed by the operating surgeon. Of those who felt they required follow-up after three months, no serious complications were identified (and therefore missed prior to the nurse phone call).

Of interest, the nurse-led telephone follow-up project identified only 6 patients who required consultant follow-up. 90.5% of the patients observed either would have not required any follow-up or sought follow-up prior to three months time, including the two septal haematomas. Both of these patients would still have had to contact ENT services to seek help under the previous follow-up protocol. The new patient information leaflet with emergency contact details now streamlines this process. Previously patients with emergency complications may have presented to the GP or accident and emergency prior to being referred to ENT potentially delaying emergency treatment and impacting on these services. However, both patients contacted ENT services by the number provided and received the treatment they required within four hours of contacting the department.

From this data, the ENT department has changed practice and no longer follows patients up routinely following nasal surgery. An amended version of the nurse-led follow up patient leaflet is given to patients pre-operatively. It gives signs and symptoms of possible complications and emergency phone numbers. The ENT team are currently auditing progress from this change of practice.

Conclusion

Nurse-led follow up is a clinically effective, safe and cost efficient method of following up patients following nasal surgery. This method also improves the efficiency of ENT outpatient services as it stops unnecessary follow up appointments being booked. From the data of this project, it appears that the majority of patients either don't require follow up or will seek follow up prior to three months. As such this project provides some evidence to previous work that routine follow up following nasal surgery is not necessarily required following uncomplicated operations.

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Declaration of interests

Nothing to declare.

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