Abstract:

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An Example of Ideal Utilisation of Specialist Services by Primary Care: Cervical Check

Cervical cancer accounts for 2.8% of all malignant neoplasms, excluding non-melanoma skin cancer, in women. It is a cancer of young women 50% of all cases diagnosed in women aged 46 years. Free smear tests are provided every three years for women aged 25 to 64 years and are operated in line with best international practice. The annual report of Cervical Check from 2009/2010 showed that 308,130 free smear tests to 279,877 women were done. 2,544 treatments were performed at colposcopy. Pre-cancerous abnormalities were detected in 5,518 women. CervicalCheck uses the Bethesda classification for cytology and the terminology is based on squamous intraepithelial lesions (SIL). These are divided into 3 groups consisting of Low grade SIL (LSIL) which includes HPV-associated cellular changes and mild dyskaryosis, High grade SIL (HSIL) which includes moderate dyskaryosis, severe dyskaryosis, carcinoma in situ and finally squamous cell carcinoma. Dyskaryosis is identified in cells as nuclear changes. Laboratory reports equate mild dyskaryosis with LSIL and moderate and severe dyskaryosis with HSIL. Cytological changes in squamous cells which are not normal and do not fulfill the criteria for SIL are classed as atypical squamous cells (ASC).

As part of the South West GP Training Programme an audit was conducted on the referrals to the colposcopy unit in the south west region from June to August 2011 inclusive. The colposcopy service in Kerry General Hospital is utilised by GPs in the South West Specialist training scheme in GP. The Compuscope system in the Colposcopy unit ofisode was used for this audit. Particular attention was on ASCUS (Atypical Cells of undetermined significance) as it had been noted by the colposcopy unit staff that the number of inappropriate referrals for ASCUS was high and that specific guidelines were not being adhered to. The specific guidelines for ASCUS in 2011 were as follows, 1st ASCUS should be repeated in 6 months. Three consecutive ASCUS should be referred to colposcopy. Refer 1st ASCUS after having treatment for Cervical Intraepithelial Neoplasms (CIN) to colposcopy. Refer any 3 ASCUS in 10 years to colposcopy or any ASCUS within 3 smears of LSIL (low grade squamous intra-epithelial lesion).

Introduction

CervicalCheck uses the Bethesda classification for cytology and the terminology is based on squamous intraepithelial lesions (SIL). These are divided into 3 groups consisting of Low grade SIL (LSIL) which includes HPV-associated cellular changes and mild dyskaryosis, High grade SIL (HSIL) which includes moderate dyskaryosis, severe dyskaryosis, carcinoma in situ and finally squamous cell carcinoma. Dyskaryosis is identified in cells as nuclear changes. Laboratory reports equate mild dyskaryosis with LSIL and moderate and severe dyskaryosis with HSIL. Cytological changes in squamous cells which are not normal and do not fulfill the criteria for SIL are classed as atypical squamous cells (ASC). As part of the South West GP Training Programme an audit was conducted on the referrals to the colposcopy unit in the south west region from June to August 2011 inclusive. The colposcopy service in Kerry General Hospital is utilised by GPs in the South West Specialist training scheme in GP. The Compuscope system in the Colposcopy unit ofisode was used for this audit. Particular attention was on ASCUS (Atypical Cells of undetermined significance) as it had been noted by the colposcopy unit staff that the number of inappropriate referrals for ASCUS was high and that specific guidelines were not being adhered to. The specific guidelines for ASCUS in 2011 were as follows, 1st ASCUS should be repeated in 6 months. Three consecutive ASCUS should be referred to colposcopy. Refer 1st ASCUS after having treatment for Cervical Intraepithelial Neoplasms (CIN) to colposcopy. Refer any 3 ASCUS in 10 years to colposcopy or any ASCUS within 3 smears of LSIL (low grade squamous intra-epithelial lesion).

There is a standard referral form to colposcopy on cervicalcheck.ie. Patient details, GP details and clinical details are essential information. Clinical details include reason for referral smear details, clinical findings and past medical history. Appropriate quality referrals were defined as those that adhered to the guidelines as well as completion of cervical check referral form. Inappropriate referrals to colposcopy were defined as those that did not adhere to the above guidelines i.e. one or two ASCUS (with no history of treatment for CIN or no LSIL result within the last three smears). The aims of the audit were to assess the number of inappropriate referrals to the colposcopy unit, to see why the referrals were inappropriate and to implement an intervention to reduce the number of these referrals.

Methods

From discussing GP referrals with the colposcopy unit staff, abnormal smears, post coital bleeding (PCB) and cervical polyps make up the majority of colposcopy referrals, which are entirely appropriate. GP referrals of ASCUS were studied over a 3-month period from 1st June 2011 to 31st August 2011 with a view to determining if they were referred as per the above guidelines. Having implemented outlined changes subsequent numbers of ASCUS referrals from GPs were examined over a 2-month period to complete the audit cycle. This re-audit cycle took place from 1st February 2012 to 31st March 2012. To ensure objectivity, two authors performed the initial audit data collection and two separate authors performed the re-audit data collection. Auditing was carried out by Dr John Crowley, Dr Cian M’Tejín, Dr Eimear McGillicuddy and Dr Patrice Kennelly, Dr Paul Hughes and Dr Mary McCartney - Consultant Obstetricians in KGH, supervised the project. The South West Specialist Training Scheme in GP granted ethical approval.

A list was compiled using the Compuscope System in the Colposcopy unit of the ASCUS referrals during the specified audit periods. The patients case notes were then reviewed with the following exclusion and inclusion criteria. Exclusion Criteria (as per NCSS guidelines) included: 3rd or more ASCUS, 1st ASCUS after having previous treatment for CIN, 1st ASCUS within 3 smears of a LSIL (low grade squamous intraepithelial lesion). Inclusion Criteria was simply two or less ASCUS. An up to date list of all the GPs referring to the Colposcopy Unit was formulated. The intervention was in the form of a letter, which was posted out to GPs individually which included the aims of the audit and the project may or may not refer the level of inappropriate referrals to the service. This correspondence with the GPs gave us the opportunity to highlight the most common reason for inappropriate referral (1st or 2nd ASCUS) and how the colposcopy service could be better utilized. A copy of the referral guidelines was also included with each letter.

Results

1st audit cycle results

The number of patients referred with first ASCUS from 01/06/2011 to 31/08/2011 was 51 patients. 90% of GP referrals adhered to the NCSS guidelines. Of the inappropriate referrals, 2 were on patients who had their first ASCUS, 1 was on a patient that had 2 ASCUS. There was also 1 referral of a patient who had LSIL on a smear greater than eighteen months and 1 referral was on a patient who had a previous CIN but had 3 subsequently normal smears. It was noted that 25% of patients had a previous abnormal smear history. Appropriate quality referrals were defined as those that adhered to the guidelines as well as completion of cervical check referral form. Inappropriate referrals to colposcopy were defined as those that did not adhere to the above guidelines i.e. one or two ASCUS (with no history of treatment for CIN or no LSIL result within the last three smears). The aims of the audit were to assess the number of inappropriate referrals to the colposcopy unit, to see why the referrals were inappropriate and to implement an intervention to reduce the number of these referrals.

2nd cycle reauditing

This showed a similar number of referrals with 57 patients referred for colposcopy with first ASCUS. An improvement from 90% to 93% of all referrals meeting guideline criteria was seen on re-audit. The reasons for inappropriate referral were similar to cycle one.

A subsequent finding of this audit showed that the quality of the information within the referral letter was also improved. Upon one stage of the audit, almost a quarter of the appropriate referrals had insufficient information and lacked full details of previous smear history. In the re-audit the content of the appropriate referrals was improved upon, with just 11% of the referrals having insufficient information.

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Discussion

The initial results proved impressive with only 10% of GP referrals being inappropriate. After implementation of the audit intervention, further improvement was noted, reducing the number of inappropriate referrals to 7%. Interestingly, a second conclusion was drawn from the results. On reviewing all referrals, a high percentage initially appeared to be inappropriate but on further investigation of these patients’ charts, the referrals were deemed appropriate. The reason that they first seemed inappropriate was that 24% of referrals had insufficient information. After implementing the intervention this was reduced to 11%. This proved to be a very interesting secondary outcome. It highlighted the fact that although GPs in the Southwest region were referring appropriately at least 90% of the time, sufficient clinical information and history were not always accompanying.

This audit provided positive feedback to GPs regarding their current practice. It was deemed important highlight the need for sufficient clinical information on referral letters to allow for a more efficient service for the patients, as well as enhancing communication between Southwest GPs and the Colposcopy Unit Staff. The Colposcopy staff and GPs are encouraged by the results of this audit. New guidelines and terminology has recently been published by the Quality Assurance (QA) Committee for The National Cervical Screening Programme. Re-auditing of ASCUS Referrals under these updated guidelines is warranted. While this audit was limited by time and numbers it did highlight the great work being carried out by GPs in the Southwest with an impressive 93% of all referrals adhering to the Cervical Check guidelines. As well as this, the quality of the referral letters is very high, with 89% containing sufficient information on history. It is hoped this high standard of referrals is continued ensuring the most effective and appropriate use of colposcopy services in KGH, which ultimately results in the best care for our patients.

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References