Treatment of low-grade cervical disease in young women in era of HPV vaccination

Povzetek prispevka 1: *Tainio K, Athanasiou A, Tikkinen KAO, Aaltonen R, Cárdenas J, Hernándes, Glazer-Livson S, Jakobsson M, Joronen K, Kiviharju M, Louvanto K, Oksjoki S, Tähtinen R, Virtanen S, Nieminen P, Kyrgiou M, Kalliala I. Clinical course of untreated cervical intraepithelial neoplasia grade 2 under active surveillance: systematic review and meta-analysis. BMJ. 2018 Feb 27;360:k499.*

Abstract

OBJECTIVE:
To estimate the regression, persistence, and progression of untreated cervical intraepithelial neoplasia grade 2 (CIN2) lesions managed conservatively as well as compliance with follow-up protocols.
DESIGN:
Systematic review and meta-analysis.
DATA SOURCES:
Medline, Embase, and the Cumulative Index to Nursing and Allied Health Literature (CINAHL) from 1 January 1973 to 20 August 2016.
ELIGIBILITY CRITERIA:
Studies reporting on outcomes of histologically confirmed CIN2 in non-pregnant women, managed conservatively for three or more months.
DATA SYNTHESIS:
Two reviewers extracted data and assessed risk of bias. Random effects model was used to calculate pooled proportions for each outcome, and heterogeneity was assessed using I^2 statistics.
MAIN OUTCOME MEASURES:
Rates of regression, persistence, or progression of CIN2 and default rates at different follow-up time points (3, 6, 12, 24, 36, and 60 months).
RESULTS:
36 studies that included 3160 women were identified (seven randomised trials, 16 prospective cohorts, and 13 retrospective cohorts; 50% of the studies were at low risk of bias). At 24 months, the pooled rates were 50% (11 studies, 819/1470 women, 95% confidence interval 43% to 57%; I^2=77%) for regression, 32% (eight studies, 334/1257 women, 23% to 42%; I^2=82%) for persistence, and 18% (nine studies, 282/1445 women, 11% to 27%; I^2=90%) for progression. In a subgroup analysis including 1069 women aged less than 30 years, the rates were 60% (four studies, 638/1069 women, 57% to 63%; I^2=0%), 23% (two studies, 226/938 women, 20% to 26%; I^2=97%), and 11% (three studies, 163/1033 women, 5% to 19%; I^2=67%), respectively. The rate of non-compliance (at six to 24 months of follow-up) in prospective studies was around 10%.
CONCLUSIONS:
Most CIN2 lesions, particularly in young women (<30 years), regress spontaneously. Active surveillance, rather than immediate intervention, is therefore justified, especially among young women who are likely to adhere to monitoring.
SYSTEMATIC REVIEW REGISTRATION: PROSPERO 2014: CRD42014014406.

Povezave do prispevkov:
https://www.ncbi.nlm.nih.gov/pubmed/?term=Taino+et+al.+BMJ+2018%3B360%3Ak499

Povzetek prispevka 2: *Jordan J, Martin-Hirsch P, Arbyn M, Schenck U, Baldauf JJ, Da Silva D, Anttila A, Nieminen P, Prendiville W. European guidelines for clinical management of abnormal cervical cytology, part 2. Cytopathology. 2009 Feb;20(1):5-16.*

Abstract

The current paper presents the second part of chapter 6 of the second edition of the European Guidelines for Quality Assurance in Cervical Cancer Screening. The first part of the same chapter was published in a previous issue (Cytopathology 2008;19:342-54). This part provides guidance on how to manage and treat women with histologically confirmed cervical intraepithelial neoplasia. The paper describes the characteristics, indications and possible complications of excisional and ablative treatment methods. The three options to monitor the outcome after treatment (repeat cytology, HPV testing and colposcopy) are discussed. Specific recommendations for particular clinical situations are provided: pregnancy, immuno-suppression, HIV infection, post-menopause, adolescence and cyto-colpo-histological disparity. The paper ends with recommendations for quality assurance in patient management and some general advice on how to communicate screening, diagnosis and treatment results to the woman concerned. Finally, a data collection form is attached.

Povezave do prispevkov:
https://www.ncbi.nlm.nih.gov/pubmed/?term=Jordan+J+et+al+.+Cytopathology+20(1)%3B+5-16%2C+2009

Povzetek prispevka 3: *Jordan J, Arbyn M, Martin-Hirsch P, Schenck U, Baldauf JJ, Da Silva D, Anttila A, Nieminen P, Prendiville W. European guidelines for quality assurance in cervical cancer screening: recommendations for clinical management of abnormal cervical cytology, part 1. Cytopathology. 2008 Dec;19(6):342-54.*

Abstract

The current paper presents the first part of Chapter 6 of the second edition of the European Guidelines for Quality Assurance in Cervical Cancer Screening. It provides guidance on how to manage women with abnormal cervical cytology. Throughout this article the Bethesda system is used for cervical cytology terminology, as the European guidelines have recommended that all systems should at least be translated into that terminology while cervical intraepithelial neoplasia (CIN) is used for histological biopsies (Cytopathology 2007; 18:213-9). A woman with a high-grade cytological lesion, a repeated low-grade lesion or with an equivocal cytology result and a positive human papillomavirus (HPV) test should be referred for colposcopy. The role of the colposcopist is to identify the source of the abnormal cells and to make an informed decision as to whether or not any treatment is required. If a patient requires treatment the colposcopist will decide which is the most appropriate method of treatment for each individual woman. The colposcopist should also organize appropriate follow-up for each woman seen. Reflex testing for high-risk HPV types of women with atypical squamous cells (ASC) of undetermined significance with referral for colposcopy of women who test positive is a first option. Repeat cytology is a second possibility. Direct referral to a gynaecologist should be restricted to special circumstances. Follow-up of low-grade squamous intraepithelial lesion is more difficult because currently there is no evidence to support any method of management as being optimal; repeat cytology and colposcopy are options, but HPV testing is not sufficiently selective, unless for older women. Women with high-grade squamous intraepithelial lesion (HSIL) or atypical squamous cells, cannot exclude HSIL (ASC-H) should be referred without triage. Women with glandular lesions require particular attention. In a subsequent issue of Cytopathology, the second part of Chapter 6 will be presented, with recommendations for management and treatment of histologically confirmed intraepithelial neoplasia and guidance for follow-up of special cases such as women who are pregnant, postmenopausal or immunocompromised.

Povezave do prispevkov:
https://www.ncbi.nlm.nih.gov/pubmed/?term=Jordan+J+et+al.+Cytopathology+19(6)%3B+342-354%2C+2008

Povzetek prispevka 4: *Moscicki AB, Shiboski S, Hills NK, Powell KJ, Jay N, Hanson EN, Miller S, Canjura-Clayton KL, Farhat S, Broering JM, Darragh TM. Regression of low-grade squamous intra-epithelial lesions in young women. Lancet. 2004 Nov 6-12;364(9446):1678-83.*

Abstract

BACKGROUND:
The aim of this study was to assess the probability of low-grade squamous intra-epithelial lesion (LSIL) regression in young women, and to examine the factors associated with this regression.
METHODS:
In a longitudinal study of human papilloma virus (HPV) infection, female adolescents aged 13-22 years were examined every 4 months by cytology, colposcopy, and HPV DNA status. Both prevalent and incident LSIL cases were included in the analysis, with regression defined as at least three consecutive normal Pap smears.
FINDINGS:
Median follow-up time from baseline (defined as the time of first LSIL diagnosis) for the 187 women with LSIL was 61 months (IQR 34-80). Median time they had been sexually active at diagnosis was 3.2 years (2.6-6.5). Probability of regression for the entire cohort was 61% (95% CI 53-70) at 12 months and 91% (84-99) at 36 months of follow-up. No associations were found between LSIL regression and HPV status at baseline, sexual behaviour, contraceptive use, substance or cigarette use, incident sexually transmitted infection, or biopsy. Multivariate analysis showed that only HPV status at the current visit was associated with rate of regression, whether infection was caused by one or more viral types (relative hazard=0.3 [95% CI 0.21-0.42], and 0.14 [0.08-0.25], respectively).
INTERPRETATION:
The high rate of regression recorded in this study lends support to observation by cytology in the management of LSIL in female adolescents. Negative HPV status was associated with regression, suggesting that HPV testing could be helpful in monitoring LSIL.

Povezave do prispevkov:
https://www.ncbi.nlm.nih.gov/pubmed/?term=Moscicki+AB+et+al.+Lancet.+2004

Povzetek prispevka 5: *Ostör AG. Natural history of cervical intraepithelial neoplasia: a critical review. Int J Gynecol Pathol. 1993 Apr;12(2):186-92.*

Abstract

The literature dealing with the natural history of cervical intraepithelial neoplasia (CIN) since 1950 is reviewed, in particular from the viewpoint of regression, persistence, and progression. When stratified into the various grades of severity, the composite data indicate the approximate likelihood of regression of CIN 1 is 60%, persistence 30%, progression to CIN 3 10%, and progression to invasion 1%. The corresponding approximations for CIN 2 are 40%, 40%, 20%, and 5%, respectively. The likelihood of CIN 3 regressing is 33% and progressing to invasion greater than 12%. It is obvious from the above figures that the probability of an atypical epithelium becoming invasive increases with the severity of the atypia, but does not occur in every case. Even the higher degrees of atypia may regress in a significant proportion of cases. As morphology by itself does not predict which lesion will progress or regress, future efforts should seek factors other than morphological to determine the prognosis in individual patients.

Povezave do prispevkov:
https://www.ncbi.nlm.nih.gov/pubmed/?term=%C3%96st%C3%B6r+%3CAG+et+al.++Int+J+Gynecol+Pathol.+1993%2C+12(2)%3A186-92