

**Abstract:***NATURAL HISTORY OF CERVICAL INTRAEPITHELIAL NEOPLASIA GRADE 2 UNDER ACTIVE SURVEILLANCE – A SYSTEMATIC REVIEW AND META-ANALYSIS***Aims**

Although cervical intraepithelial neoplasia grade 2 (CIN 2) is often considered the histological cut-off to proceed to conisation, a substantial proportion of CIN 2 lesions regress spontaneously, particularly in young women. We aimed to estimate the rates of regression, persistence, progression and compliance with follow-up in women with CIN 2 managed with active surveillance.

**Method**

Medline, Embase and CINAHL were searched from 1.1.1973 to 20.8.2016 for studies reporting on outcomes of histologically-confirmed CIN 2 in non-pregnant women, managed with active surveillance for at least three months. Data extraction and risk of bias assessments were performed independently and in duplicate. Pooled proportions for each outcome were calculated with random-effects model and inter-study heterogeneity was assessed using  $I^2$  statistics.

**Results**

We identified 36 studies (seven control arms of randomised controlled trials, 16 prospective and 13 retrospective cohort studies) that reported on the outcomes of 3093 women. At 24 months, the regression rate was 50% (95% confidence interval (CI) 43%-67%;  $I^2$  77%), the persistence rate 32% (95%CI 23%-42%;  $I^2$  82%), while the progression rate 18% (95%CI 11%-27%;  $I^2$  90%). In a subgroup analysis of 4 studies that included 1039 women under the age of 30, the rates were 60% (95%CI 57%-63%;  $I^2$  0%), 23% (95%CI 20%-26%;  $I^2$  97%) and 11% (95%CI 5%-19%;  $I^2$  67%), respectively.

**Conclusion**

The majority of CIN 2 lesions regress spontaneously, particularly in young women. Close active surveillance is justified for selected young women with CIN 2 that are likely to adhere to monitoring.

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