

## **GUILTY OR NOT GUILTY?: SMOKING IN THE AETIOLOGY OF MULTIFOCAL VULVAL INTRAEPITHELIAL NEOPLASIA**

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This study was carried out in order to analyse the multifocality and anatomical distribution of VIN3 and to assess the relationship between smoking and VIN3.

**Methods:** This is a retrospective study of 80 women with a histologically confirmed diagnosis of VIN3 presenting between 1985 and 2002. The study was carried out in dedicate vulval clinic at a large District Teaching Hospital in North London.

**Results:** The mean age of presentation was 41.5 years (median 38, range 19-94). The mean duration of follow-up was eight years (median 8, range 1-18 years). Fifty-two (65%) women were smokers. Of the 80 women, 54(67.5%) were diagnosed with multifocal disease in the form of intraepithelial neoplasia in at least one other lower genital tract site (cervix, vagina or perianal region). Microinvasion at first excision was detected in 20 out of 80 women (25%). The labia minora and fourchette were the commonest sites affected by VIN3. Only 22 of 80 women were cured with a single treatment whilst thhe remaining 58(72.5%) women needed multiple sessions of treatment. Multiple logistic regression analysis showed that women who smoked and those who had extensive vulval disease were statistically more likely to have multifocal disease. Women who continued to smoke after treatment were 30 times more likely to have persistent disease.

**Clonclusions:** Women who smoke are statistically more likely to have multifocal intraepithelial neoplasia. Women who continue to smoke after surgical treatment are 30 times more likely to have persistent vulval disease. Initial surgical treatment of VIN3 should involve local excision of the lesion and multiple treatment sessions may be necessary. As VIN3 is associated with multifocal disease, complete assessment should include proctoscopy in addition to colposcopic examination of the cervix and vagina.