



## A multipronged novel approach to prevent cervical cancer through non-invasive integrative management of cervical precancerous lesions

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### Abstract

**Background:** Cervical cancer is a preventable disease. Yet in India more cases are detected in advanced stages and the morbidity and mortality in women due to this cancer is high.

**Objective:** To use our experience of Pap smear screening and integrative medicine to promote prevention of cervical cancer through early detection of cervical precancer and non-invasive integrative management (NIIM) when possible.

**Methods:** i) Screening with conventional Pap smears of all women above 30 years of age in a general charitable hospital serving under-privileged women ii) Identification of cervical cancer, and precancerous lesions, other gynaecological cancers iii) Advocacy for colposcopy, sonography, when necessary and appropriate referrals iv) Innovative non-invasive integrative management (NIIM) of Low-Grade Squamous Intraepithelial Lesions (LSIL) using knowledge base of Traditional Ayurvedic medicine.

**Results:** i) Cases in the Ayurvedic general hospital have been screened since 1999 but the program for NIIM for precancer started in 2008 ii) Review of spontaneous or induced regression of cancer, in vitro, in vivo, anticancer activity of medicinal plant extracts of *Curcuma longa* (CL) and *Inspira cordifolia* (TC) iii) Preclinical, Volunteer studies for safety iv) Exploratory clinical studies on activity and safety of NIIM of LSIL with oral extracts of CL following standard antimicrobials for genital infections. These confirm the role of NIIM in inducing regression in abnormal Pap smears.

**Conclusions:** In view of persistence, recurrences and some complications after surgical treatment of cervical precancerous lesions (e.g., cervical stenosis or incompetence, premature deliveries) we propose the use of safe, non-invasive integrative treatment of cervical precancer lesions with antimicrobials and standardized *Curcuma longa* extracts as a feasible option. This is clinically important because many of these women are in younger age group (childbearing), and many women do not have the monetary or community means to access surgical treatment by trained personnel due to expenses or non-availability.

### Biography

Dr Jayashree Joshi has expertise in clinical research, pharmacokinetics, gynaecologic cytology including LBC, Biomarkers, and Medicinal plants. She was granted research fellowships in WHO, UK, and ICMR, India. Her frontline areas include drug-interactions, drug delivery systems (Oral, Injectables, Implants, Vaginal Rings, Microbicides, IUDS), and drug development. She has worked in semi-tribal areas for 11 years and has suggested few improvisations. She was a postgraduate guide for MSc and PhD students. Her current interests are: i) improving bioavailability of iron in unique formulations with simultaneous attenuation of side effects reported with conventional oral iron in Anaemia, ii) drug development for treatment of Non-Alcoholic Fatty Liver Disease (NAFLD), iii) non-invasive integrative management to induce regression of early cervical neoplasia with antimicrobials and standardized oral plant extracts, for prevention of consequences of genital infections like PID & Cervical Cancer. She has >130 publications, including 11 Chapters and a monograph to her credit.

### Publications

Dr Jayashree Joshi, A multipronged novel approach to prevent cervical cancer through non-invasive integrative management of cervical precancerous lesions

19<sup>th</sup> Annual summit on Surgical Oncology  
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