

The 41st Annual Meeting of the Society of Gynecologic Oncologist was held in March 2010. Several abstracts reported retrospective studies that evaluated the prognostic significance of new 2009 FIGO staging guidelines compared to old 1988 FIGO guidelines system.

Stage I

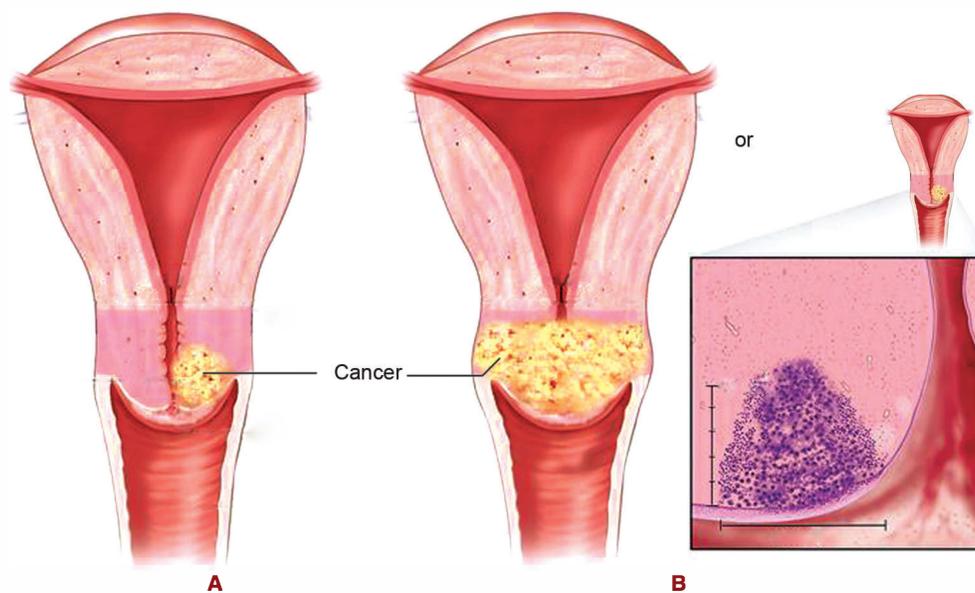
Stage I is carcinoma strictly confined to the cervix

IA1: Confined to the cervix, diagnosed only by microscopy with invasion of <3 mm in-depth and lateral spread <7 mm.

IA2: Confined to the cervix, diagnosed with microscopy with invasion of >3 mm and <5 mm with lateral spread <7 mm.

IB1: Clinically visible lesion or greater than A2, <4 cm in greatest dimension (Fig. 1.1A).

IB2: Clinically visible lesion, >4 cm in greatest dimension (Fig. 1.1B).



Figs 1.1A and B: Stage I of cervical cancer

Stage II

Stage II is carcinoma that extends beyond the cervix, but does not extend to the pelvic wall. The carcinoma involves the vagina but not as far as the lower third (Fig. 1.2).

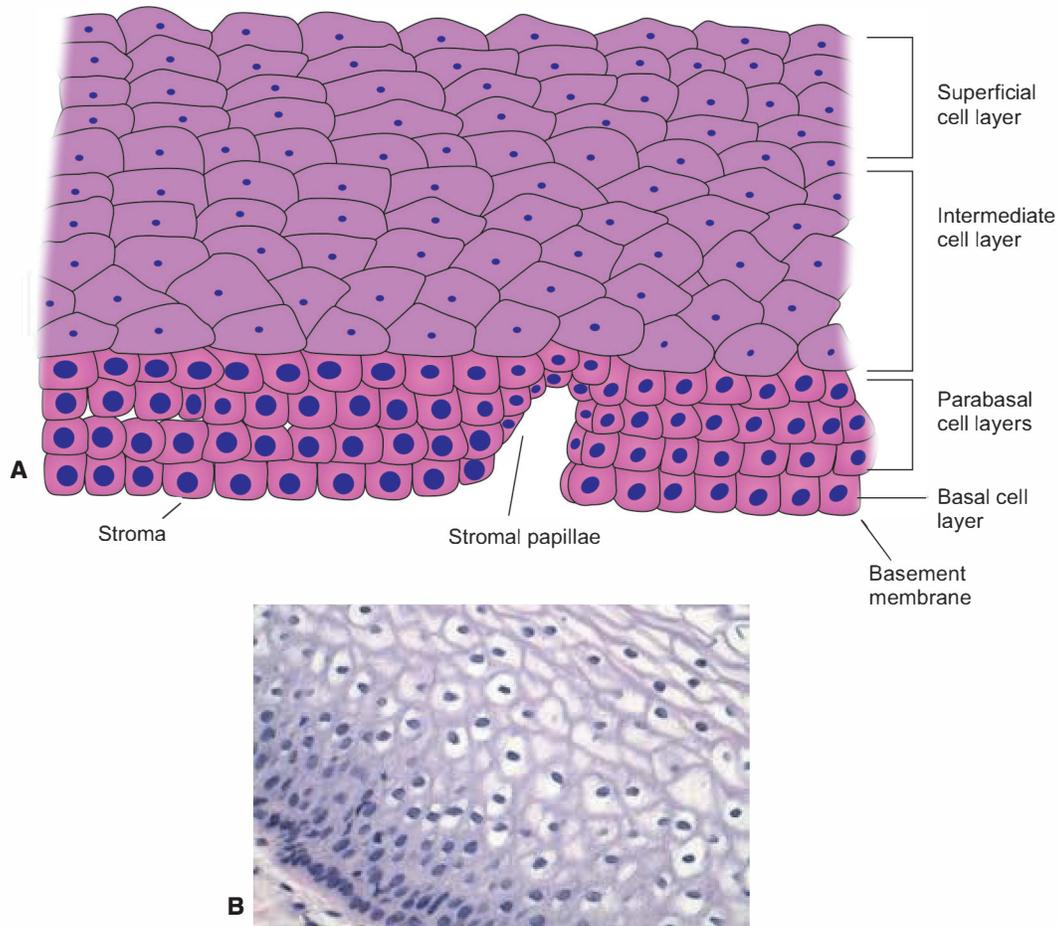
IIA1: Involvement of the upper two-thirds of the vagina, without parametrial invasion, <4 cm in greatest dimension.

IIA2: >4 cm in greatest dimension.

IIB: With parametrial involvement.

epithelium. The endocervix is covered completely by columnar epithelium. The squamocolumnar junction (SCJ) is situated at the external os. Identifying SCJ is a vital step in colposcopic examination.

Squamous epithelium: A mature stratified squamous epithelium is composed of four layers (Figs 2.1A and B): (1) Basal layer; (2) Parabasal layers; (3) Intermediate layer; and (4) Superficial layer.



Figs 2.1A and B: Stratified squamous epithelium—(Note 1) The coloring scheme shown above and noted below is purely schematic in nature for the aid of the reader to quickly identify the different cell types. (Color code: Violet: Physiological superficial and intermediate layers; Pink: Physiological basal and parabasal layers.) The pathological cells in layers will be represented by darker shade of the respective color code. The pathological cells will be seen in subsequent chapters. (Note 2) Actually the cells are colorless. Different colors are seen due to different staining techniques.

Basal and parabasal cells are round cells with large nucleus in comparison to cytoplasm, intermediate cells are polygonal in shape with abundant cytoplasm and small round nuclei forming basket weave pattern, superficial cells are flattened with pyknotic nuclei and transparent cytoplasm.

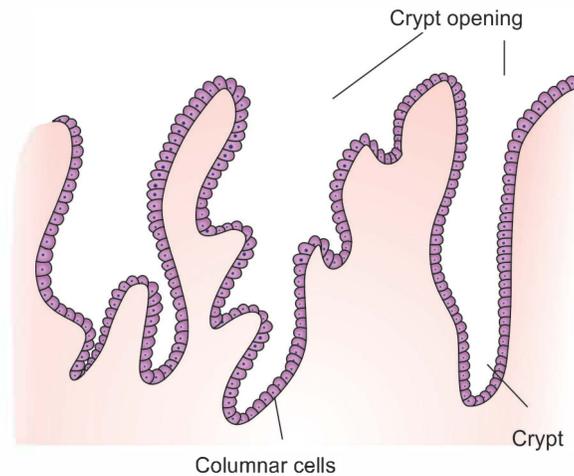


Fig. 2.4: Columnar epithelium thrown into folds to form crypts

Normal Cervix



Fig. 2.5: Columnar epithelium seen as reddish grape-like structure, squamous epithelium is seen as pinkish structure

Cervical polyp (Figs 2.6A and B): A cervical polyp is an overgrowth and enlargement of single columnar epithelial papillae which appears as reddish mass protruding from the cervical os.

Squamocolumnar Junction

The squamocolumnar junction (SCJ) is the dynamic junction of squamous epithelium and columnar epithelium. The position of SCJ varies according to the age and hormonal status of the woman (Figs 2.7A and B).



3

Normal Transformation Zone

During childhood and perimenarche, the original squamocolumnar junction is located at or very close to, the external os. During puberty due to the influence of hormone estrogen, there is growth of endocervical columnar cells. The endocervical cells enlarge in size. The cervix swells and the endocervical canal elongates. There is buckling of the endocervical cells and later on overgrowth of the endocervical columnar epithelium. This leads to the eversion of the columnar epithelium of the lower part of the endocervical canal on the ectocervix. This condition is called **ectropion** or **ectopy** (Fig. 3.1), which is visible as angry reddish looking ectocervix, which is sometimes referred to as erosion or ulcer.

In the active phase of ectopy, the SCJ moves out from the os and is located distally on the ectocervix. The columnar epithelium of the endocervix maintains its continuity while covering the ectocervix now replacing the squamous epithelium. The everted columnar epithelium is usually arranged in a single layer follicular—flat type. Sometimes they are thrown into inwards folds to accommodate in the area—follicular type of ectropion or follicular ectopy; sometimes they get folded inwards and outwards—papillary ectopy. Underneath the epithelium, there are evidences of round cell infiltration and glandular proliferation. The columnar epithelium is less resistant to infection than the squamous epithelium. Ectropion becomes very prominent during pregnancy and in the patients on oral contraceptive pills.

The everted columnar epithelium on the ectocervix is under constant effect of acidic pH. This leads to the stimulation of subcolumnar reserve cells. These cuboidal sub-columnar reserve cells then proliferate to produce a reserve cell hyperplasia, lifting off the columnar epithelium and replacing it by a thin multilayered immature squamous epithelium without stratification. Morphologically, the reserve cells are similar to the basal cells of the squamous epithelium, with round nucleus and a little cytoplasm. These cells then proliferate and differentiate to immature squamous epithelium. The immature cells do not produce glycogen; hence do not stain brown or black with Lugol's iodine. In the due course, the immature metaplastic squamous cells differentiate into mature stratified squamous epithelium. This is now called mature metaplasia.

Contents

<i>Forewords</i>	vii-x
<i>Preface to the Second Edition</i>	xi
<i>Preface to the First Edition</i>	xiii
Section 1: Clinical Practice: Colposcopy	
1. Cervical Cancer: A Killer Disease	3
2. Anatomy and Histology of Uterine Cervix	11
3. Normal Transformation Zone	20
4. Normal and Abnormal Blood Vessels	27
5. Introduction to Colposcopy	31
6. Principals and Techniques of Colposcopic Examination	39
7. Cervical Intraepithelial Neoplasia	46
8. Grading of Colposcopy Findings (Scoring System)	68
9. The New IFCCPC Colposcopy Classification	83
10. CIN Treatment	88
11. Sterilization of the Instruments Used	99
12. Clinical Cases and Concurrent Diagnosis	101
Section 2: Clinical Diagnostics	
13. Cervical Cytology	117
14. Molecular Detection of HPV	125
15. Histopathology of Cervical Lesions	148
Section 3: Preventive Health	
16. Importance of Screening	163
17. Prophylactic and Therapeutic Vaccines	168
Section 4: Miscellaneous	
18. Vaginal Intraepithelial Neoplasia (VAIN)	177
19. Vulvar Intraepithelial Neoplasia (VIN)	179
20. Color Atlas: Colposcopic Pictures of Different Conditions	183
<i>Appendix</i>	193
<i>Bibliography</i>	213
<i>Index</i>	215