

## GLOSSARY - Terminology

**Ablative therapy:** treatment that removes HSIL by destroying the surface cells with disease and the surrounding tissues (see excisional therapy).

**Acanthosis:** benign, disturbed maturation without atypia, does not contain glycogen or stain with iodine. Common in original squamous epithelium or congenital metaplasia.

**Acetowhite:** white lesion visible only after vinegar (acetic acid) is applied. Due to immature metaplasia, congenital transformation zone, inflammation, healing, HPV infection, or neoplasia.

**Adenocarcinoma:** cancer of columnar or glandular type cells.

**Amenorrhea:** lack of or stopping of menstrual periods.

**Aneuploidy:** cells have incomplete sets of chromosomes, irregular numbers of chromosomes, found in HSIL and cancer.

**Anisokaryosis:** variation in nuclear size.

**Angiogenesis:** stimulating blood vessel growth.

**Apoptosis:** destruction of damaged cells during process of cell division.

**Arias-Stella effect:** focal, unusual, decidual changes in glandular epithelium, with intraluminal budding, nuclear enlargement and hyperchromatism, and cytoplasmic swelling and vacuolation often associated with ectopic or uterine pregnancy.

**Atrophic:** cells or epithelium that lack estrogen effects, epithelium is thinner (fewer cell layers), cells are smaller and lack cytoplasm, inflammation is common. Typical in menopause, but sometimes seen in nursing women.

**Atypia:** statement of uncertainty if reactive or dysplastic on Pap.

**Atypical vessels:** abnormal vessels, may vary in diameter or not branch regularly.

**Biopsy:** removal of a small piece of tissue for examination under the microscope.

**Brachytherapy:** radiation using cervical implants or insertion of radioactive material inside the cervix.

**Carcinoma in situ:** precancerous lesion. Cells have characteristics of cancer but are confined to the epithelium, not invaded through the basement membrane, nor reached blood vessels or lymphatics.

**Carcinoma:** cancer of surface type cells (squamous or columnar).

**Chemoradiation:** cancer treatment with combined anticancer medications (cisplatin) and radiation. Radiation combines external X-ray therapy and brachytherapy.

**Cervicography:** photograph of vinegar soaked cervix that is reviewed by an expert colposcopist.

**Chromatin:** nuclear material, chromosomes.

**Colposcope:** binocular dissecting microscope with a built in light source.

**Colposcopy:** examination of the cervix and other areas with a colposcope with the use of acetic acid (vinegar). Usually includes directed biopsies of lesions suggestive of dysplasia.

**Columnar epithelium:** single cell layer thick, from upper limit of metaplasia to internal os. Appears red as blood vessels are superficial.

**Condyloma:** warts; may be papillary, spiked, flat (acetowhite change), or inverted

**Conization:** cutting out (with knife, LEEP, laser) area of cervix around the os

**Curettage:** scraping a surface with a sharp instrument to remove clumps of superficial cells for examination under the microscope

**Cystoscopy:** examination of the inside of the bladder.

**Cytology:** microscopic examination of cell spread out on a slide and stained with dyes that help distinguish the internal structures.

**Dysmenorrhea:** menstrual cramps.

**Dysplasia (Dyskaryosis):** precancerous or undifferentiated cells, with disordered growth and maturation, nucleus is enlarged and cytoplasm is often smaller.

**Ectopic:** tissue in the wrong place, often refers to a pregnancy outside of the uterus (in the fallopian tube).

**Endocervical canal:** area up inside the cervix that can not be easily seen, extends from the opening visible on the cervix (external os) to the opening into the body of the uterus (internal os). This area may have hidden disease, especially AIS or adenocarcinoma in younger women or HSIL or squamous cancer in older (postmenopausal) women.

**Endocervical cells (EC):** glandular cells, extend from the SCJ to the internal cervical os.

**Endocervical curettage (ECC):** scraping cells and tissue from inside the cervix for examination under the microscope. Also called endocervical sampling.

**Endometrial biopsy (EMB):** suctioning or scraping cells and tissue from inside the body of the uterus for examination under the microscope.

**Endometriosis:** occurrence of endometrial tissue outside of the body of the uterus, frequently forming cysts containing altered blood. May be on cervix, inside the abdomen, or elsewhere in the body.

**Eversion:** exposure of columnar area due to enlargement of the cervix. Occurs in adolescence and pregnancy. May be apparent due to spread of os by the vaginal speculum.

**Excisional therapy:** treatment that removes HSIL by cutting off the surface cells with disease and the surrounding tissues (see ablative therapy).

**Fistula:** developing an abnormal opening like between the bowel and vagina, bowel and skin, or between the bladder and vagina.

**Glandular epithelium:** columnar epithelium.

**Histology:** microscopic examination of slide of tissue (biopsy, LEEP specimen, surgical specimen).

**Hybrid Capture II:** test for HPV.

**Hyperchromatic:** increased amounts of chromatin or darker nucleus.

**Hyperkeratosis:** benign, reactive, thicker cornified squamous cells without retained nuclei; dense white, thick, rough epithelium. Like a callous. Often visible on the cervix without vinegar. (see leukoplakia)

**Hyperplasia:** an increase in the number of cells in a tissue or organ, excluding tumor formation, so the bulk of the part or organ may be increased

**Hysterectomy:** surgical removal of the uterus. Causes menopause (sudden stopping of menses).

**Hysterectomy (abdominal):** surgical removal of the uterus, done through the abdominal wall. Can be subtotal, simple, total, or radical.

**Hysterectomy (radical):** surgical removal of the uterus, tubes, and ovaries with surrounding lymph nodes and other tissue. Done for cancer.

**Hysterectomy (simple):** surgical removal of the uterus (body and cervix). Sometimes called a total hysterectomy (as contrasted to subtotal hysterectomy).

**Hysterectomy (subtotal):** surgical removal of the body of uterus, leaving the cervix. About 7% of women still have light periods.

**Hysterectomy (total):** surgical removal of the uterus (body and cervix), tubes and ovaries. Sometimes used for simple hysterectomy. If in doubt, the surgical report may need to be obtained.

**Hysterectomy (vaginal):** surgical removal of the uterus, done through the vagina. The cervix must be removed. It is more difficult to remove the tubes and ovaries so they are often left.

**Immature squamous epithelium:** from SCJ to inner and outer limits of metaplasia. The neoplastic potential is maximal and, if present, is usually found in this area.

**Invasion:** ability of cells to cross or invade the basement membrane, changing from intraepithelial neoplasia to cancer.

**Keratinization:** resistant, thick, opaque, horny surface layer (callous). Found in congenital transformation zone, acanthotic epithelium, warts, CIN-3, and cancer.

**Koilocytosis:** HPV infection; enlarged, irregular, wrinkled nuclei with smudged chromatin, vesicular, perinuclear clearing, and cytoplasmic condensation.

**Laparoscopy:** examination of the inside of the abdomen with a lighted tube through a small cut in the abdomen. This is less stress on the body and leaves about a 1 inch or smaller scar.

**Laparotomy:** examination of the inside of the abdomen by major surgery.

**Leukoplakia:** thick, keratinized, white lesion visible without applying vinegar.

**Lymphatics:** lymph vessels, go between lymph nodes (glands).

**Mature squamous epithelium:** from OSCJ to metaplasia, contains Nabothian cysts, gland openings, etc. The neoplastic potential is minimal unless already contains HSIL.

**Mesonephric duct:** wolffian duct, a duct in the embryo draining the mesonephric tubules. In the male it becomes the ductus deferens. In the female it becomes vestigial or disappears but sometimes forms residual cysts.

**Metaplasia:** change of one mature cell type to another, changing from columnar to squamous epithelium. Mild inflammation may occur.

**Metastasize:** ability to invade through blood vessels or lymphatics, spread, and grow among different kinds of cells.

**Monsel's solution:** ferric subsulfate, an iron compound that causes clotting of blood and stops bleeding after biopsy.

**Mosaic vessels** in parallel red rings or irregular honey-comb, abnormal if around acetowhite epithelium. Significant if large or irregular in acetowhite area.

**Neoplasia:** abnormal new growth of tissue; including CIN, AIS, cancer.

**Normal vessels:** blood vessels that branch at acute angles, smaller caliber after branch.

**Nucleolus (nucleoli):** small, rounded mass of microfilaments and granules within nucleus where ribonucleoprotein is produced.

**Oncogenes:** genes that produce growth factors, make cells grow and divide in the fetus or in cancer.

**Original squamous epithelium:** from Hart's line (outer vagina) to original SCJ (OSCJ), minimal neoplastic potential.

**Os:** mouth, or opening of the cervix.

**Parakeratosis:** delicate white, slightly rough epithelium; benign, reactive, superficial zone of cornified cells with retained nuclei. Is pale with Schiller's iodine. Is common after cryotherapy or in estrogen-deficient maturation.

**Paralytic ileus:** bowels not working for several days after surgery.

**Pelvic exenteration:** surgical removal of the uterus, tubes, ovaries, bladder, lower bowel, and surrounding tissue and lymph nodes for advanced cancer.

**Perinuclear halo:** cytoplasmic condensation or clearing, forming “empty space” in the cell, commonly caused by HPV infection.

**Pleomorphism:** variation in nuclear size and shape in cells.

**Polyploidy:** cells have multiple complete sets of chromosomes, found in dividing cells and LSIL.

**Positive margins:** disease extended to the edge of the cone (LEEP) specimen or surgery specimen. This could mean that disease (HSIL or cancer) may be left in the woman.

**Pseudo-hyperkeratosis:** on cytology caused by skin contamination from fingers handling the slides.

**Punctation:** visible end of capillary loop causing a red dot pattern of blood vessels, significant in acetowhite epithelium.

**Rb:** retinoblastoma (protein), originally found in eye (retinal) cancer. A growth suppressor or tumor suppressor.

**Salpingo-oophorectomy:** surgical removal of the tubes and ovaries.

**Satisfactory colposcopy:** able to visualize the entire new SCJ and inner limits of any lesion present. This means none of the lesion is hidden inside the endocervical canal.

**Schiller test:** Iodine staining of glycogen in mature epithelial cells. Metaplasia, atrophy, columnar epithelium, inflammation, and neoplasia are non-staining.

**Sensitivity (of test):** % of persons with disease among all persons who have a positive test (see specificity).

**Sigmoidoscopy:** examination of the inside of the lower bowel.

**Skip lesion:** treatment of SIL may leave behind abnormal cells on either the inside or outside edge. If both are present than at follow-up the obvious outside disease may be seen and the hidden (endocervical) disease may be missed (skipped).

**Specificity (of test):** % of persons without disease among all persons with a negative test (see sensitivity).

**Speculoscopy:** inspection of vinegar soaked cervix with a special chemoluminescent light.

**Squamocolumnar junction (SCJ):** border between squamous cells and columnar cells.

**Squamous epithelium:** multiple (30) cell layers thick, resistant. Found in the vagina and outer cervix. Appears pale as the blood vessels are deep.

**Stenotic or stenosis:** scarred or tight opening (of the cervix).

**Syncytia:** large sheets of cells.

**Telomeres:** mitotic clock, sequence of DNA that protects and positions the end of the chromosome. Normally one is lost with each cell division so prevents unlimited chromosome replication.

**Telomerase:** enzyme (protein) that repairs frayed ends of chromosomes and adds new telomeres, permitting prolongation of cell lifespan, or if very high, immortalization. Active in all cancers.

**Thrombo-embolic disease:** blood clots in legs or pelvis that may spread to lungs.

**Trachelectomy:** surgical removal of the cervix to the internal os with the surrounding tissue. Then cerclage of cervix (purse-string suture in cervix to hold the canal closed) is usually done. This is used for treatment of some early cancer when the woman still wants to have children.

**Transformation zone (TZ):** from the original SCJ (last gland) to current SCJ, and up to 5 mm inside apparent (visible with colposcope) SCJ. Area in which HSIL and cancer is found.

**Tumor diathesis:** Pap with many red blood cells, white blood cells and necrotic material, suggests cancer.

**Ulcer:** breakdown in friable tissue, loss of epithelium

**Unsatisfactory colposcopy:** unable to visualize entire new SCJ and inner limits of the lesion inside the endocervical canal.