NCPTS

The Bethesda System for reporting Cervical Cytology

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THE BETHESDA SYSTEM
Principles

- must communicate clinically relevant information to the patient's health-care provider
- should be uniform and reasonably reproducible between pathologists and laboratories
- must reflect the most current understanding of cervical neoplasia

Bethesda 2001 is currently in use in New Zealand

- Used to report all cervical/vaginal cytology since 1 July 2005
- Standard report text is used by all laboratories
- Free comments can be added to the report but do not go to the NCSP-Register
- Bethesda 2014 is likely to be introduced in 2018

The Bethesda System

Specimen Adequacy

Interpretation/Result

Recommendation

Adequacy: Satisfactory

The specimen is satisfactory for evaluation.

The specimen is satisfactory for evaluation. No endocervical/transformation zone component is present.*

* At least 10 well-preserved endocervical or squamous metaplastic cells either singly or in clusters, constitutes an adequate transformation zone component.

Comments

- The presence or absence of a transformation zone component provides a useful quality indicator for sample takers but is not associated with increased detection rates of squamous lesions.

- The specimen is satisfactory if atypical or abnormal cells are identified, by definition.

Adequacy: Unsatisfactory

The specimen is unsatisfactory for evaluation because….

- of insufficient squamous cells.
- of poor fixation/preservation.
- foreign material obscures the cells.
- inflammation obscures the cells.
- blood obscures the cells.
- of cytolysis/autolysis.

Interpretation/Result

- All reports are categorised by the result to assist sample takers to process reports
- The category is given as a heading at the top of the report

Negative for Intraepithelial Lesion or Malignancy

Epithelial Cell Abnormality

Other

Negative for Intraepithelial Lesion or Malignancy

Normal findings

Organisms

Other non-neoplastic findings

- Reactive changes (optional to report) e.g. associated with inflammation, previous radiation, an IUCD etc.
- Normal endometrial cells in women 40+ yrs (NZ)
- Atrophy (optional to report)

Organisms

There are organisms consistent with *Trichomonas vaginalis*

There are fungal organisms morphologically consistent with *Candida* species

There is a shift in microbiological flora suggestive of bacterial vaginosis

There are bacteria morphologically consistent with *Actinomyces* species

There are cellular changes consistent with *Herpes simplex virus*

Reactive/non-neoplastic changes

There are reactive cellular changes present.

There are endometrial cells present in a woman over the age of 40 years.

There are atrophic cellular changes present.

Epithelial cell abnormalities

Squamous

Atypical Squamous Cells (ASC)

- of undetermined significance (ASC-US)
- cannot exclude HSIL (ASC-H)

LSIL: Low-grade Squamous Intraepithelial Lesion

HSIL: High-grade Squamous Intraepithelial Lesion

-with features suspicious for invasion

Squamous Cell Carcinoma

Glandular

Atypical Glandular/Endocervical/Endometrial Cells (AGC)

Atypical glandular/endocervical cells, favour neoplastic

Endocervical Adenocarcinoma in Situ (AIS)

Adenocarcinoma: endocervical/endometrial/extrauterine/NOS

Other

Other Malignant Neoplasms

There are abnormal cells consistent with a malignant neoplasm.

(sarcoma/lymphoma/melanoma)

RECOMMENDATION

The next smear should be taken in three years, based on the smear history held on the NCSP-Register.

……..*other report recommendations depending on the report, clinical and NCSP history*

In view of the abnormal clinical history provided, urgent referral for assessment is recommended regardless of the cytological findings.

The Bethesda System References

- The 2001 Bethesda System. Terminology for Reporting Results of Cervical Cytology. Solomon D. et al

  JAMA April 24 2002 Vol 287 No.16 pp 2114-9

- The Pap Test and Bethesda 2014. Nayar R, Wilbur DC.

  Cancer Cytopathol 2015;123:271-281

- The Bethesda System for Reporting Cervical Cytology.

  Nayar and Wilbur 3rd Edition 2015 Springer

- www.cytopathology.org/NIH

  (Website atlas of images)