The Milan System for Reporting Salivary Gland Cytopathology

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MILAN SYSTEM
No financial conflict of interest •

• Co-editor of the Milan System of Reporting Salivary Gland Cytology, Springer 2018

• Author of the Bethesda System of Reporting Thyroid Cytology, Springer 2017

• No royalties accepted from either book
The debut of the Milan system in NICE and ESP
The development of an international system
“As ideas are preserved and communicated by means of words, it necessarily follows that we cannot improve the language of any science, without at the same time improving the science itself; neither can we, on the other hand, improve a science without improving the language or nomenclature which belongs to it”

Antoine-Laurent Lavoisier (1743-1794), French chemist
“An accurate cytologic diagnosis of disease is both possible and desirable: therefore, the reports should be expressed in simple language that can be readily understood by the clinician.”

Leo Koss – Diagnostic Cytology and its Histopathologic Bases, 1st ed, 1961
Histological Typing of Salivary Gland Tumours

WORLD HEALTH ORGANIZATION

GENERAL PREFACE TO THE SERIES

Among the prerequisites for comparative studies of cancer are international agreement on histological criteria for the classification of cancer types and a standardized nomenclature. At present, pathologists use different terms for the same pathological entity, and furthermore the same term is sometimes applied to lesions of different types. An internationally agreed classification of tumours, acceptable alike to physicians, surgeons, radiologists, pathologists and statisticians, would enable cancer workers in all parts of the world to compare their findings and would facilitate collaboration among them.

In a report published in 1952, a subcommittee of the WHO Expert Committee on Health Statistics discussed the general principles that should govern the statistical classification of tumours and agreed that, to ensure the necessary flexibility and ease in coding, three separate classifications were needed according to (1) anatomical site, (2) histological type, and (3) degree of malignancy. A classification according to anatomical site is available in the International Classification of Diseases, the foundations of which were laid as long ago as 1853 when the first International statistical congress was held in Brussels. Responsibility for the decennial revision of the International lists of causes of disease and death was taken over in 1924 by the Health Organisation of the League of Nations and since 1947 has passed to the World Health Organization. The 1965 revision contains a much more detailed classification of neoplasms by anatomical site than did its predecessors.

The question of establishing a universally accepted classification by histological type has received much attention during the last 20 years and a particularly valuable Atlas of Tumor Pathology—already numbering more than 40 volumes—is being published in the USA by the Armed Forces Institute of Pathology under the auspices of the National Research Council. An Illustrated Tumour Nomenclature in English, French, German, Latin, Russian, and Spanish has also been published by the International Union Against Cancer (UICC).

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The World Health Organization became involved in 1956 when the WHO Executive Board passed a resolution requesting the Director-
Editorial

Is it time we adopted a classification for parotid gland cytology?
Why do we need a reporting system for salivary gland cytology?

• Current reporting confusion:
  • Diversity of diagnostic categories, vs.
  • Descriptive reports (no categories), vs.
  • Surgical pathology terminology

• General agreement on the need for a defined set of diagnostic categories for salivary gland FNA
  • Clarity of communication (implicit cancer risk)
  • Exchange of data across institutions

The Milan System for Reporting Salivary Gland Cytopathology
Why Milan?
Sponsored by the ASC and the IAC

Practical classification system that will be user-friendly and internationally accepted

Evidence-based system with a useful format for clinicians

The classification system and ROM for the diagnostic categories was further refined according to literature
The Benefits of a Uniform Reporting System for Salivary Gland Cytopathology

- Improve communication between pathologists and clinicians
- Improved patient care
- Facilitate cytologic-histologic correlation
- Promote research into the epidemiology, molecular biology, pathology, and diagnosis
- Foster sharing of data from different laboratories for collaborative studies
The Milan System for Reporting Salivary Gland Cytopathology

Core Group

Co-Editors: William Faquin & Esther D. Rossi

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Guliz Barkan
Maria Pia Foschini
Daniel Kurtycz
Marc Pusztaszeri
Philippe Vielh
1. Overview of Diagnostic Terminology and Reporting:
   Zubair Baloch and Andrew Fields (leads), Bruce Wenig, Andrew Field, Nora Katabi

2. Nondiagnostic/Unsatisfactory:
   Mariapia Foschini and Esther Diana Rossi (leads), Kayoko Higuchi, Ivana Kholova, Jhala Nirag, Makato Urano, Laszlo Vass, Philippe Vielh

3. Non-neoplastic:
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4. AUS:
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5. Neoplastic (benign & SUMP):
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6. Suspicious for Malignancy:
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7. Malignant:
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8. Ancillary Studies:
   Mark Pusztaszeri (lead), Jorge Reis-Filho, Fernando Schmitt

9. Clinical Management:
   Mark Varvares (lead), Piero Nicolai, Mandeep Bajwa

10. Histologic Considerations and Salivary Gland Tumor Classification in Surgical Pathology
    Bruce Wenig
CLASSIFICATION SYSTEM
<table>
<thead>
<tr>
<th>Diagnostic category</th>
<th>Risk of malignancy (%)&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Management&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Non-Diagnostic&lt;sup&gt;c&lt;/sup&gt;</td>
<td>25</td>
<td>Clinical and radiologic correlation/repeat FNA</td>
</tr>
<tr>
<td>II. Non-Neoplastic</td>
<td>10</td>
<td>Clinical follow-up and radiologic correlation</td>
</tr>
<tr>
<td>III. Atypia of undetermined significance (AUS)</td>
<td>20&lt;sup&gt;d&lt;/sup&gt;</td>
<td>Repeat FNA or surgery</td>
</tr>
<tr>
<td>IV. Neoplasm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Neoplasm: Benign</td>
<td>&lt;5</td>
<td>Surgery or clinical follow-up&lt;sup&gt;e&lt;/sup&gt;</td>
</tr>
<tr>
<td>B. Neoplasm: Salivary Gland Neoplasm of Uncertain Malignant Potential (SUMP)</td>
<td>35</td>
<td>Surgery&lt;sup&gt;f&lt;/sup&gt;</td>
</tr>
<tr>
<td>V. Suspicious for malignancy (SM)</td>
<td>60</td>
<td>Surgery&lt;sup&gt;f&lt;/sup&gt;</td>
</tr>
<tr>
<td>VI. Malignant</td>
<td>90</td>
<td>Surgery&lt;sup&gt;f, g&lt;/sup&gt;</td>
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THE HIGH NOON OF SALIVARY CYTOLOGY??

Milan System?

Descriptive classical cytology?
ON THE MILAN CASES
SUPER FRIENDS!