## Cellular pathology audit template

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| Date of completion | (To be inserted when completed) |
| Name of lead author/ participants | (To be inserted) |
| Specialty | Cellular pathology/Oral, maxillofacial and head & neck pathology |
| Title | An audit of quality of reporting of nasal biopsies taken for the diagnosis and assessment of mucosal swellings, including polyps |
| Background | The RCPath *Tissue pathways for oral and head and neck pathology* include recommendations for dealing with biopsies of polypoid lesions from the nasal cavity and paranasal sinuses. These may apply to clinical details, sampling, identification of the anatomical sites biopsied, macroscopic description, embedding, processing, reporting and interpretation. Problems in any of these areas could result in a suboptimal message and might impact negatively on the management of these patients. |
| Aim & objectives | To determine compliance with recommendations and standards relevant to the various steps involved in processing biopsies from the nasal cavity, including:  adequacy of clinical information  appropriateness of sampling  adequacy of macroscopic description and processing  quality of microscopic description, report and interpretation. |
| Standards & criteria | **Criteria range:**  Some items (e.g. Item 2 ‘Clinical description’ and Item 5 ‘All or part submitted’) are not necessary to permit interpretation of the histological findings and do not require compliance as such. They are regarded as examples of good clinical practice, reflecting the quality of the patient management pathway.  Item 8 (Decalcification): Non-compliance is recorded if the calcified material is sufficiently bulky to have compromised section quality (e.g. thickness, folds, displacement).  Item 12: Definitive statement on the presence or absence of invasive malignancy is not necessary on all samples (e.g. a simple inflammatory polyp on a background of rhinosinusitis).  Other items: 100%, or, if not achieved, the existence of documentation that explains the variance.  **Clinical**  The clinical indication for biopsy should be stated (e.g. nasal obstruction, chronic rhinosinusitis, presence of a mass lesion). A description of the site(s), extent and appearances of the abnormality (e.g. location and distribution within nasal cavity).  **Site of origin**  Biopsies from different parts of the nasal cavity and paranasal sinuses should be submitted and processed in such a way that their site of origin is identifiable. If the site of a biopsy is not identifiable, the audit response is ‘no’, but discretion is advised.  **Macroscopic description**  Representative samples of larger lesions (e.g. polyps greater than 10 mm in diameter) can be submitted but smaller pieces would normally be embedded in their entirety. Small and/or fragmented biopsy specimens can be difficult to orientate and interpret. Recording such findings may provide partial explanation of equivocal reports. The presence of firm areas or hard tissue should prompt decalcification.  **Slide preparation**  A minimum of a single H&E-stained section per tissue block should be examined. In cases where fungal involvement is suspected (e.g. where there is clinical suspicion of allergic fungal sinusitis or where bands of eosinophils form laminations within altered mucin), it is possible to identify fungal organisms on the H&Es but the use of histochemical stains is useful in affirming the absence of fungal infection.  **Microscopic report**  The report should describe the changes in the respiratory mucosa, bearing in mind the normal histological differences between subsites (e.g. the absence of accessory glands in tissue from the paranasal sinuses compared with the nasal cavity proper). The differential diagnosis of polypoid lesions of respiratory mucosa includes conditions that have specific histopathological features, offering the opportunity to redress clinical uncertainty and provide definitive diagnosis.  If queried explicitly in the clinical information, the report should address the presence or absence of a neoplastic process (e.g. a sinonasal papilloma). If the microscopic findings are considered equivocal, the report would normally offer an approach to the resolution of that uncertainty (e.g. further biopsy or referral for expert opinion).  **Turnaround time**  The timeliness of reporting should comply with turnaround times as agreed with the clinical users of the service. This applies to all specimens, including apparently simple inflammatory nasal polyps. |
| Method | **Sample selection:**  At least 25 cases from local archives, ideally sequential and from the past two years.  **Data to be collected on proforma (see below).** |
| Results | (To be completed by the author)  The results of this audit show the following compliance with the standards.   |  |  | | --- | --- | |  | % compliance | | **Clinical details** | | | 1. Indication for biopsy is stated clearly |  | | 1. Clinical description of the lesion is recorded: | | | 1. Site or sites of lesion |  | | 1. Appearances of lesion |  | | 1. Clinical diagnosis is recorded |  | | 1. Anatomical site of origin is clearly identifiable for all biopsies |  | | 1. Indication whether all or part of the lesion is submitted |  | | **Macroscopic description/slide preparation** | | | 1. Number of fragments is recorded |  | | 1. Size of the largest fragment is recorded |  | | 1. Where hard tissue has been identified, decalcification has been performed |  | | 1. At least one H&E is available for each tissue block |  | | 1. Histochemical stains to demonstrate fungal organisms are available (if appropriate and if the report states that fungal infection is not identified) |  | | **Microscopic report** | | | 1. Biopsies from separate sites are described separately or biopsies from different sites which have the same features are described together |  | | 1. Definitive statement is made as to whether or not there is tumour |  | | 1. Description of changes in mucosal morphology is clear enough to be ascertained by the auditor |  | | **Summary and conclusions** |  | | 1. Summary of microscopic changes is given |  | | 1. Preference for a diagnosis, or the inability to distinguish between diagnoses, is recorded |  | | 1. The report is authorised within the locally agreed turnaround time. |  | | 1. If a significant unexpected finding is detected, the locally agreed protocol for advising the clinical team has been enacted |  |   **Commentary:** |
| Conclusion | (To be completed by the author) |
| Recommend- ations for improvement | Present the result with recommendations, actions and responsibilities for action and a timescale for implementation. Assign a person(s) responsible to do the work within a timeframe.  **Some suggestions:**  highlight non-compliance with recommendations  present findings to colleagues in histopathology or clinical services. |
| Action plan | (To be completed by the author – see attached action plan proforma) |
| Re-audit date | (To be completed by the author) |
| Reference | 1. Royal College of Pathologists. *Tissue pathways for oral and head and neck pathology.* Accessed November 2023. Available at: [https://www.rcpath.org/profession/guidelines/cancer-datasets-and-tissue-pathways.html#](https://www.rcpath.org/profession/guidelines/cancer-datasets-and-tissue-pathways.html) |

## Data collection proforma for reporting of nasal biopsies taken for the diagnosis and assessment of mucosal swellings, including polyps

## Audit reviewing practice

Patient name:

Hospital number:

Date of birth:

Sample no.:

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|  | **1**  **Yes** | **2**  **No** | **3**  If no, was there documentation to explain the variance? **Yes/No** plus free-text comment | **4**  Compliant with guideline based on ‘Yes’ from column 1 or an appropriate explanation from column 3. **Yes/No** |
| **Clinical details** | | | | |
| Indication for biopsy is stated clearly |  |  |  |  |
| Clinical description of the lesion is recorded:   1. Site or sites of lesion 2. Appearances of lesion |  | | | |
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| Clinical diagnosis is recorded |  |  |  |  |
| Anatomical site of origin is clearly identifiable for all biopsies |  |  |  |  |
| Indication whether all or part of the lesion is submitted |  |  |  |  |
| **Macroscopic description/slide preparation** |  |  |  |  |
| Number of fragments is recorded |  |  |  |  |
| Size of the largest fragment is recorded |  |  |  |  |
| Where hard tissue has been identified, decalcification has been performed |  |  |  |  |
| At least one H&E-stained slide is available for each biopsy |  |  |  |  |
| Histochemical stains to demonstrate fungi are available (if report states that fungal infection is not identified) |  |  |  |  |
| **Microscopic report** |  |  |  |  |
| Biopsies from separate sites are described separately or biopsies from different sites which have the same features are described together |  |  |  |  |
| Definitive statement is made as to whether or not there is invasive malignancy |  |  |  |  |
| Description of changes in mucosal morphology is clear enough to be ascertained by the auditor |  |  |  |  |
| **Summary and conclusion** |  |  |  |  |
| Summary of microscopic changes is given |  |  |  |  |
| Preference for a diagnosis, or the inability to distinguish between diagnoses, is recorded |  |  |  |  |
| The report is authorised within the locally agreed turnaround time. |  |  |  |  |
| If a significant unexpected finding is detected, the locally agreed protocol for advising the clinical team has been enacted |  |  |  |  |

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| **Audit action plan**  An audit of quality of reporting of nasal biopsies taken for the diagnosis and assessment of mucosal swellings, including polyps | | | | | | |
| Audit recommendation | Objective | Action | Timescale | Barriers and constraints | Outcome | Monitoring |
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