## Research paper 2

## Audit of turnaround time of biopsy specimens in histopathology laboratory of a tertiary care centre

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**Introduction and objectives:** Turnaround-time (TAT) is the time from specimen receipt at the laboratory until the issue of the report. It is a part of quality assurance and a performance indicator. Short TAT facilitates patient management. The Royal College of Pathologists recommends that 80% of diagnostic biopsy reports be issued within seven days of surgical intervention. This audit aims to evaluate TAT of biopsies received at the histopathology laboratory of National Hospital Kandy and its determinants.

**Methodology**: Data were extracted from archives retrospectively for two months, from 01.09.2021 to 01.11.2021. The TAT was analysed on biopsies and curettings, excluding frozen sections and urgent requests.

**Results:** 874 small biopsies were analysed. The minimum, maximum and mean TATs were 3, 25 and 6 days, respectively. 76.4% (n=667) were issued within 7 days and 86.27% (n=754) within 10 days. Out of delayed reports which took >7 days, 67% (n=138) required special stains, immunohistochemistry and more sampling, whereas 33% (n=68) were related to non-informative requests and issues with resources and staff related to Covid-19 pandemic.

**Discussion and conclusion:** The causes for delayed reports are special procedures, resampling, resectioning, inadequate clinical details, improper fixation and processing and lack of resources. Tailor-made request forms with previous reference details, standard practices in specimen transport, grossing and macroscopic detailing, proper orientation of biopsies at embedding and processing them separately with shorter processing time facilitate better microscopic evaluation and easy reviewing, avoiding further sectioning. Skilled personnel for data entry minimize the post-analytical delay. Periodic educational programmes for staff are mandatory. Frequent audits of TAT disclose deficiencies and implementations, facilitating the timely issue of quality histopathology reports.

**Keywords:** histopathology laboratory, turnaround time, biopsy

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