

### **Importance of Synoptic Reporting for Specimens with Cancer Diagnosis**

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Cancer diagnoses are increasing day by day in the world and takes up a significant number of specimens reported in pathology laboratories. In Bangladesh, the vast majority of surgical pathology reports of resected cancer specimens have the traditional narrative format with more emphasis on a microscopic description of the tumour composition rather than on providing critical information like the status of lymphovascular invasion or tumour size. At the present time, a lot of tumor-specific information is required for management of oncological patients with the modern multidisciplinary approach. The morphological parameters may vary depending on the nature of the cancer and the organ involved. The traditional narrative reports are variable in terminology and formatting, making it difficult to locate critical information like the status of surgical margin or tumour grade. For the last several decades, the pathology reporting in general is evolving from narrative style to standardized structured reports, commonly referred to as synoptic reporting system, resulting in improved reporting of essential parameters in a consistent and efficient manner.<sup>1,2</sup>

Synoptic reporting is a systematic approach for reporting specific data elements in a specific format in surgical pathology reports.<sup>3</sup> Unlike the traditional narrative style pathology reports, the synoptic reporting system is equipped with a complete set of data elements in the form of synoptic templates or “worksheets” for pathology tumor reporting based on the World Health Organization (WHO) Classification and the College of American Pathologists (CAP) Cancer Checklists.<sup>4</sup> In this way, it facilitates a standard based structured method for entering the diagnostic and prognostic information in

accurate and consistent fashion for a particular pathology specimen.<sup>1,2,4</sup>

Owing to the increasing number of cancer specimens with variation in tumor type and the organ involved, pathologists often fail to include some of the information required for each tumor and tumor site. Back in 1992, Zarbo et al. reported in their landmark study, investigating 15,940 pathology reports of colorectal cancer from 332 laboratories, that essential data elements such as gross tumor size, depth of tumour invasion, status of resection margins, and tumour grades were not included in a significant number of reports.<sup>5,6,7</sup> This study also reported the completeness of surgical pathology reports for carcinoma of the colon was significantly related to the use of checklists<sup>5</sup>. Later in 1993, Rosai and his team at Memorial Sloan-Kettering Cancer Center proposed to standardize the reporting of surgical pathology diagnoses of major tumor types and provided formulated checklist format of each tumor type in order to make the reporting of surgical pathology more uniform, efficient and complete.<sup>5,7</sup> In the following years, the persistent collaborative efforts of the College of American Pathologists (CAP) and the American Society for Clinical Pathology resulted in the development of guidelines for reporting the most commonly encountered cancers.<sup>6,7</sup> Since then, the College of American Pathologists (CAP) has been recommending synoptic reporting and has published protocols and checklists.<sup>3,4</sup> Checklists or synoptic reporting provides a structured and pre-formatted method for entering clinically and morphologically relevant details of surgical specimens.<sup>4</sup> The checklists contain both required and optional data elements that have been scientifically

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validated.<sup>7</sup> The CAP cancer protocols are available at their website and accessible to all, and can be customized according to the institutional policy or the preference of practicing pathologists.<sup>4</sup>

With the ever-increasing number of cancer specimens in Bangladesh, it is time that our pathology organizations take a leading role in implementing synoptic reporting for cancer specimens across pathology laboratories. Priority should be given to dissemination of the concepts and compulsory inclusion of the minimum data set for each cancer specimens from the available synoptic reporting formats at the CAP website. The checklist in a synoptic report enables pathologists to document pathological findings in the report without using free-text component and to provide pathological diagnostic information in a more consistent manner. Synoptic reporting would thus improve patient care as well as data extraction for research purposes.

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