An audit of diagnostic surgical pathology: A tool for quality assurance. Original study in a rural teaching hospital in Eastern Uttar Pradesh, India

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Abstract: Surgical pathology is the gold standard of clinical medicine [1]. It is known to suffer greatly from subjectivity.[1] As we all know that patient management greatly depends on histopathological reports giving flawless, accurate report becomes inevitable. Thus regular auditing or monitoring performance in surgical pathology lab becomes our prime duty.

Keywords: Audit, quality control, vigilance , performance monitoring, surgical pathology.

I. Introduction

Achieving excellence in reporting requires a lot many things like availability of all the required disciplines, state of art machines, regularly maintaining good health of the machines, trained , experienced and dedicated professionals, trained technical and nontechnical staff. An institution has to make endeavours to achieve higher and to compete with its own self, here in comes the concept of auditing which is very useful and essential.

Aim: To assess the role of a quality assurance programme in improving the services provided by our surgical pathology department.

II. Materials and Methods

An internal quality assurance study of the activities of the surgical pathology department in a teaching hospital in rural Eastern Uttar Pradesh, India was undertaken for a period of 5 years. An internal quality assurance system for histopathology was devised with the aim of conducting a system review, correcting system problems and adopting a uniform approach to reporting [1]. This was achieved by peer review of five years work load by experienced pathologists. In our case, all the cases could be reviewed as the surgical pathology work load was less. This could be done by giving 1.5 hours every Friday and Saturday by the peer group. The technical and clerical staff were also involved as and when required. All the histopathology sections from Aug 2009 to July 2014 were reviewed by two experienced histopathologists who were not posted in histopathology section and results tallied. A retrospective clinicopathological correlation was done using the clinical and diagnostic information available. The clinical diagnosis and the diagnostic tests conducted were studied for authentication and tallied with the final diagnosis.[1,3,4,5]

Meeting was held every Monday 4pm-5pm being attended by all the pathologists, senior residents and technical staff. The review process examined all the aspects of the case report including patient demographics, typing errors, coding errors, adequacy of clinical history, technical quality, labelling of histological slides, diagrams, macroscopic description, microscopic report and minor and major discordant diagnoses. Turn around time, adequacy of specimen sampling and use of special stains were also assessed. Record of each meeting was maintained. A semi quantitative system for documenting errors was used. Discrepencies in our study were graded as minor or major. Minor discrepencies did not require a supplementary report. They were discussed and incorporated into daily practice. Major discrepencies with implications for patient management needed a supplementary report. The concerned clinician was informed accordingly. The overall assessment of the final histopathology report was performed based on the above criteria. [1,2,3,4].

III. Results And Discussion

In a five year study from Aug. 2009 to July 2014, a total number of 9760 cases were studied. Table No: 1 gives the number and percentage of discordant cases

Case Description	Discordant cases	%
No.of non-representative cases	05	-0.0512
Clerical errors	03	-0.031
Grossing errors	01 -	-0.0103
Processing & staining errors	03	-0.031
Total No:of unsatisfactory cases	12	-0.0123
Total No: of cases studied	9760	100
Study Period	Aug 2009	July 2014

Table No:1 showing number and percentage of discordant cases.

Out of these, 12 cases (0.123%) were unsatisfactory and invited comments.

In 1 (0.01%) case while grossing, the lesional area was not represented. This came to light while discussing with the clinician and a repeat grossing was done and multiple biopsies were processed and the malignant lesion detected eventually. At this juncture I would like to say that there should be regular interactions between the pathologists and the clinicians. Also whenever the pathologist is in dilemma as regarding the nature of the lesion a visit to the patient in question or discussion with the concerned clinician helps. It is to be remembered that thick over stained sections may be mistakenly over diagnosed by a novice for a malignant lesion. The section incharge should daily scrutinize all the sections before passing any report.

As a part of quality control programme we regularly exchange histopathology sections with our urban counterpart and also with a well established cancer institute here in the city.

Conclusion: To conclude, for safe and efficient functioning of any department regular auditing is very much required and is essential. With the help of this vigilance programme we can check our shortcomings, learn from them and thereby help one another to help our patient community [8]. This study highlights the importance of a review system in detecting errors in surgical pathology reporting. Recognition of the fact that surgical pathology is not infallible has improved the end product [7]. It has also minimized inter observer variability in the department, resulting in a uniform approach among the pathologists to macroscopic description, specimen sampling, special stains, and histological reporting [8]. Wizened by our experience our ethical committee has advised continuous surveillance activities in almost all the departments.

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