Second Opinion Subspecialty Consultations in Surgical Pathology- KU Medical Center Experience

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Abstract

Context: The accuracy in pathological diagnoses is crucial as diagnostic and/or staging discrepancies can lead to inappropriately directed patient care. We reviewed outside cases seen at our institution to assess the deficiencies in our local community Pathology practice.

Design: Retrospective review was performed of all cases sent to our pathology department for second opinion between January 2022 and April 2022. We categorized data by subspecialty for minor and major discordance. Discrepancies in tumor type, pathologic stage, histologic grade, margin status and lymphovascular invasion were documented.

Results: A total of 531 surgical pathology cases were reviewed. The overall discrepancy rate was 9.98% with 1.32% major and 8.66% minor. Breast subspecialty had the highest discrepancy rate (26.93%) with the most frequent discrepancy being in the grade of invasive ductal carcinoma. Gynecological pathology had a discrepancy rate of 18.08% with the most frequent discrepancy being in the grade of endometrioid carcinoma. Specifically, the diagnosis of endometrioid carcinoma was under called and subsequently upgraded after our institutional review. Total number of discrepancies by subspecialty are summarized in Figure 1. Specific major discrepancies are summarized in Table 1.

Conclusions: Certain subspecialties had higher discrepancy rate

compared to others. This data highlights the deficiencies in pathological diagnoses in our community practice setting. Additionally, it provides insight into the subspecialties that would benefit from tailored education to improve diagnostic accuracy.

Table 1: Major discrepancies in outside diagnoses compared with our institutional diagnoses

Subspecialty	Outside Diagnosis	Institutional Diagnosis
Breast	Encapsulated papillary carcinoma	Invasive ductal carcinoma
GYN	Carcinoma in situ	Superficially invasive squamous cell carcinoma (SCC)
GYN	Atypical endometrial glandular proliferation	FIGO grade 1 endometrioid carcinoma
GI	Acute appendicitis with transmural inflammation	Low grade appendiceal mucinous neoplasm
Bone & ST	Soft tissue leiomyoma	Soft tissue leimyosarcoma
Head & neck (Tongue)	Invasive moderately differentiated SCC	Granular cell tumor with overlying pseudocarcinomatous hyperplasia

