Cadaver Biopsies in an Integrated Curriculum Improves Medical Student Educational Experience and Increases Interest in Pathology

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Review of the literature indicates that cadaver biopsies are rarely used in undergraduate medical education. The Paul L. Foster School of Medicine preclinical curriculum integrates basic and clinical sciences. Tankside Grand Rounds (TSGR) is a capstone experience at the end of preclinical training wherein students deliver a formal case presentation of their cadavers’ suspected cause of death and premortem clinical course. Beginning with the class of 2016, every dissection team was required to take cadaveric biopsies and analyze them with pathology faculty. Assessment data indicates that this activity significantly improved TSGR presentations. We wondered how students felt it impacted them. An institutional review board (IRB)-approved survey was sent to the class of 2016 in March of their third year via email, containing a URL, and responses were gathered using Qualtrics (Provo, Utah). The survey consisted of 15 questions about degree of involvement, perceived benefits, and impact on interest in pathology. Forty-four of 73 students responded, for a 60% response rate. All respondents performed cadaver biopsies and reviewed them with faculty. Respondents agreed that cadaver biopsies improved their understanding of pathology (77%), were helpful in learning clinical connections (73%), and increased their interest in pathology/laboratory results during clerkships (60%). Ninety-eight percent agreed that this activity should continue in future years, and 24% agreed that it increased their interest in choosing a pathology residency. Free responses describing strengths fell into four themes: increased understanding of cadaver demise, anatomic relations, microscopy and histologic diagnoses, and small group learning with pathology faculty. Themes for improvement were better instruction on tissue sampling and sample processing. We concluded that students found cadaver biopsy integration with TSGR to be a valuable learning experience. It improved students’ understanding of and interest in pathology. Follow-up on the number of these students applying for pathology residencies is needed. This is a unique and innovative learning tool that might be useful at other schools.

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