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Pathology resident perspectives about early autopsy experiences

Richard A. Prayson

Department of Anatomic Pathology, L25, Cleveland Clinic, 9500 Euclid Avenue, Cleveland, OH 44195, USA

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ABSTRACT

The performance of autopsies remains an integral part of residency training in Anatomic Pathology. A number of medical schools no longer require an autopsy experience; therefore, a subset of pathology residents has never seen an autopsy performed prior to commencement of residency training. Although much as been written regarding student's perspectives on their medical school anatomy experiences, practically nothing has been written about resident perspectives on the autopsy experience. Surveys were sent to all Pathology resident trainees (n = 27) in a training program exploring resident perspectives on their early autopsy experiences. Of the 13 residents who completed the survey, ten indicated a discomfort level of 3 or 4 (Likert scale of 1–5 with 1 = no discomfort and 5 = very uncomfortable) associated with their first autopsy; the most commonly cited reasons included discomfort with odors/body fluids (n = 6), fear of making a mistake (n = 5), and uncertainty about what to do (n = 4). Six residents felt it would be worthwhile to engage in a discussion around the first autopsy experience to help process it. In summary, a subset of residents experience discomfort around their first autopsy experience. Sensitivity to and acknowledgement of this discomfort and an opportunity to vet feelings and concerns should be considered as part of Pathology residency education.

1. Introduction

Much has been written examining the emotional aspects associated with cadaver dissection in the medical school educational arena [1-5]. Students are confronted with a variety of emotions related to a number of aspects of the dissection experience that can be unsettling. These include issues surrounding a student's perspectives on death and dying, a reminder about the failure of medicine to stave off the inevitability of death, and the socially taboo nature of cutting up dead bodies and what is perceived as an assault to the senses that engaging in such behavior conjures up. In putting together a short editorial piece on the subject [6], it became clear that relatively little has been written exploring Pathology residents' perspectives on the autopsy experience. For a growing number of residents, their first exposure to an autopsy may be as a Pathology resident. Although there are some superficial similarities of the autopsy to cadaver dissection in anatomy class, there are a number of additional issues that make the experience unique.

The purpose of this current study was to survey a small group of Pathology residents currently in training and explore their perspectives on their early autopsy experiences.

2. Materials and methods

Institutional Review Board (IRB) approval was obtained prior to commencement of the study. A survey instrument was created to explore Pathology resident perspectives on their autopsy experience. Surveys were completed and returned in an anonymous fashion. The surveys were sent to all Pathology residents (n = 27) in the Cleveland Clinic training program, twice by email and paper copies were alternatively made available for completion.

The survey instrument asked for the following information: 1) age and gender of the resident; 2) current year of training in residency; 3) exposure to autopsy prior to starting residency; 4) discomfort related to his or her first autopsy; 5) thoughts related to performing his or her first pediatric autopsy; 6) utility of discussing autopsy discomforts with others; and 7) comparing the first autopsy experience with medical school anatomy dissection experience.

For those interested, an open invitation to discuss any aspect of the survey was extended to all residents when the survey was sent out.

3. Results

Thirteen residents (n = 48.1%) completed the survey, including three first year residents, two second year residents, five third year residents, and three fourth year residents. The residents who did respond to the survey include seven females and six males who ranged in age from 27 to 41 years (mean 31 years).

Seven of the residents indicated that they had seen or participated in an autopsy prior to starting residency and six had not. When asked to rate their discomfort level on a scale of 1 (no discomfort) to 5 (very

E-mail address: praysor@ccf.org.

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uncomfortable) associated with their first autopsy experience, ten residents indicated a discomfort level of 3 or 4; two residents scored their discomfort as a 1 and one resident as a 2. Of the six residents who had not seen or participated in an autopsy prior to residency, five scored their discomfort level as a 3 or 4.

A variety of reasons were cited as contributing to discomfort at the time of their first autopsy experience. The most commonly cited issues included discomfort with smells/odors or body fluids associated with the autopsy (n = 6), a fear of making a mistake (n = 5), uncertainty about what they were doing (n = 4), and concern about contaminating themselves while performing the autopsy (n = 3). One resident each expressed concerns about cutting a fresh body, fear of cutting his or herself, discomfort with doing an autopsy on a young patient, seeing a dead person, the body being exposed/private parts not covered up, the brutality of the procedure, the warmth of the body, the "story" of the person, and issues related to her/his religious background.

When asked how she or he felt when she or he performed their first pediatric autopsy, nine residents indicated that they felt sad for the child/infant and the family of the deceased. Two residents described feeling uncertain about special procedures/considerations needed in the pediatric dissection. Two residents indicated that they were not too affected; one of these two residents suggested this might be due to the fact she/he did not have children yet themselves. One resident each indicated that they were worried beforehand but were fine when they started, just had to focus on the task and block out emotional feelings, were nervous to miss something, were surprised on how pristine the anatomy was, felt like she/he were violating something sacred, and thought it was emotionally hard to deal with the situation.

When asked if they had discussed their feelings with anyone before or after their first autopsy, six residents indicated that they had and all six found the discussion helpful in processing the experience. Of these residents, five indicated that they had that discussion with a spouse, parent or significant other; the sixth resident did not indicate with whom she/he had the discussion. When asked how the discussion proved useful, one resident each commented, it was OK to feel the way I did"; "helpful to decompress"; "I complained on how gross it was and how it made me sick"; "it was my first pediatric case"; and "it was helpful just to talk about it".

When asked whether or not they thought it would be worthwhile as part of residency training to spend some time before and/or after performing the first autopsy to engage in a dialogue with someone at work to help process the experience, six residents indicated yes and seven said no. Comments which were made relevant to this prompt include the following: "I would be afraid of being evaluated on a personal level"; "helpful to voice my disgust"; "would be helpful especially if I had never participated in an autopsy before"; "I talked with coresident and a medical school mentor"; and "it would be harder to open up to someone I do not know personally".

When asked how their first autopsy experience compared with the first time they performed an anatomy dissection, the most common responses included a feeling that the autopsy felt more personal (not anonymous) (n = 4), the odors/smells were different (n = 2), there was less apprehension because of the anatomy experience (n = 2) and anatomy had much more of an educational purpose to it (n = 2). One resident each commented that she/he thought the processes were similar with better visualized anatomy at autopsy, thought there would be more overlap, the focus was different (less focus on muscles, nerves, and arteries), more of a sense of responsibility to be meticulous at autopsy, the body "was not just a cadaver", the two processes were not that different, the autopsy had more of a purpose to it, anatomy was much better planned and more of a team effort, and autopsy was a much more comfortable and comprehensive experience than anatomy.

Incidentally, three residents individually approached me to discuss the survey and their thoughts on it. Two voiced their discomforts with the autopsy experience, even after performing several of them. The third resident had questions about what prompted the survey.

4. Discussion

Much of the focus on Pathology residency education, as driven by competencies and milestones, centers on skills and tasks necessary for one to independently and effectively "practice medicine" [7]. Interestingly, there is relatively little attention paid to the humanistic side of these activities. The closest we come to this, under the guise of professionalism, is to charge our Pathology residents to "demonstrate personal responsibility to maintain emotional, physical, and mental health" [7]. It is particularly easy to focus on tasks related to developing competency and forget about the fact that the tissue or blood samples we analyze belong to real people. Unlike many of our clinical colleagues, we do not have daily direct interactions with patients to remind us of this. Nonetheless, most pathologists would agree that what a pathologist does is important in patient care, often dictating decision making and courses of treatment.

Of all the tasks we ask our trainees to learn how to perform, one of the most complex involves learning how to perform an autopsy. The exercise is the ultimate in amalgamating the findings of dissection with the clinical history to create a story of what happened. It requires an understanding of clinical medicine, pathology and pathophysiology, as one tries to piece together and connect the findings with the clinical history. Arguably, it is the closest an anatomic pathologist comes to directly dealing with the whole patient. Everything is there, including a body but excepting the ability to directly communicate with the person whose body is being autopsied. Consequently, this is the scenario where our humanistic emotions, thoughts and feeling are most likely to emerge. The purpose of this study was to explore what some of those emotions, thoughts and feelings might be around the autopsy experience from the vantage of those who are training in Pathology.

There appears to be four major take home points from this small study. The first is the fact that the autopsy experience, although it shares the dissection aspect with anatomy classes in medical school, is different. The focus of cadaveric dissection in medical school is to learn anatomy. The autopsy is charged with much more. Autopsy requires an understanding of anatomy, but as previously discussed, it asks one to try and put together a story, to uncover what really happened with the patient. Cadaveric dissection is typically performed on an embalmed body of an older individual whose name and history are withheld. The autopsy is typically performed on a fresh cadaver, sometimes still warm. The patient may be any age, including pediatric or the same age as the resident. The resident knows the name and the clinical history of the patient. There is a heightened sense of obligation in an autopsy, beyond learning anatomy and respecting the body, which are the major charges of anatomy dissection. There are enough differences that despite having participated in anatomy dissection as a student, one may not be prepared for the additional aspects which accompany the autopsy exercise.

The second point is that it is clear from this study that a majority of survey responders indicated that they felt some degree of discomfort when first tasked with performing an autopsy. The contributing factors to this are diverse. The most commonly articulated reasons revolved around insecurity, being inexperienced and unsure of what one is supposed to do and fearing that subsequently one might make a mistake. This likely comes from a sense of wanting to do a good job because that is what the task asks for (i.e. the morally right thing to do) and to perform well on a task in which they are being observed and will be evaluated on. These concerns are similar to what other residents in training in other specialties would confront in learning and performing any task or procedure. There were, however, several other articulated concerns - worries about smell, contamination by body fluids, cutting oneself, warmth of the body, the brutality of the procedure, religious beliefs and lack of propriety in how the body is handled as compared with how students were taught to be respectful of patient privacy in the outpatient or hospital setting. This latter group of responses underscores some of the more personal and human aspects of the experience

and that these concerns are real and pretending that they are not so by ignoring them does not change the fact that they exist.

The third take home point is a corollary of the second; pediatric autopsies are not unexpectedly more emotionally laden experiences for some residents. The death of a child often seems more unnatural. Interestingly, a few residents in reflecting back, suggested that this feeling may be heightened after one has her/his own children. The identification/extrapolation of one's own circumstance can be emotionally challenging. Medical students I have talked with are sometimes reminded of family members they have lost in the facial resemblance of a cadaver to their loved one. Having a child potentially could heighten one's sensitivity to the tragedy and what a loss of a child might represent as a parent. Also of note was the fact that one resident articulated a strategy for coping; focus on the task and block out the emotional feelings. Studies have shown that a similar strategy is employed by some medical students who approach the cadaver as a biological specimen rather than a former living human being in trying to deal with the cadaveric anatomy dissection [8].

The final take home point from this study is the idea that a subset of residents found it valuable to debrief with someone about their experiences. It is clear that the situation is a difficult one for some residents. Encouraging residents to reflect on such experiences is potentially worthwhile. Similar to medical students and anatomy, many try and deal with the experience on their own by pretending everything is fine [9]. What is the harm to publically acknowledge the discomforts and normalize them by doing so? Arguably, this should be a standard part of orientation to the autopsy in any training program. Creating a safe environment for residents who wish to engage in a dialogue should be considered. It would encourage reflection and help them making meaning of these experiences. It sends a message that reflection is a good thing and that engaging in a dialogue can be helpful. In the process of acknowledging the human aspects of what we do, it sends message that it is good to be authentically human and that it is important to be aware of and process our feelings and emotions. It allows faculty an opportunity to role model reflective practice. A dialogue also potentially provides an opportunity for the mentor to learn and grow, a chance to see things from another's perspectives, perspectives which may be very different but not necessarily any less valid.

Although competencies and milestones form the cornerstones of what we believe Pathology resident trainees should learn to be effective practitioners, training programs also need to be cognizant of the “art” and humanistic side of medicine, those less tangible things we want our trainees to learn - the ability to self-reflect, to process feeling and emotions in a constructive manner, and to be able to empathize with our patients.

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