



Letter From the Guest Editor



Laura D. Knight MD Guest Editor

Key organ systems in forensic pathology that spring to mind most often in the differential diagnosis of likely cause of death prior to autopsy are 1) the heart, and 2) the brain, because of their frequent involvement in the pathophysiology of sudden deaths. Perhaps the lungs also, with their pulmonary thromboemboli, would be near the top of the list. The liver and pancreas, however, are the focus of this issue, and the hepatobiliary system is one rich in potential pathology, including lethal and other forensically-relevant pathology. Overlooking this organ system in any autopsy would be a grave error, and it is only fitting that it be the featured theme for an issue of *Academic Forensic Pathology*.

The particular pathologic entities in the hepatobiliary system most relevant to forensic pathology tend to be those related to trauma, including child abuse; hepatic necrosis; alcohol-related pathologies of the liver like cirrhosis, alcoholic hepatitis, and fatty liver; nonalcoholic fatty liver disease and metabolic syndrome/diabetes mellitus; and acute and chronic pancreatitis (whether related to alcohol or other disease processes). Four invited reviews in this issue address the pancreas. Dr. Alfredo Walker's exhaustive review of the adult pancreas in disease and trauma describes the myriad of pancreatic conditions that may be encountered during a forensic autopsy, along with his-





tory, pathophysiology, diagnostic features, and significance. Forensic pathologists will find the description and history of the finding of vacuolation of pancreatic acinar cells particularly interesting. Dr. Robert Stoppacher reviews acute pancreatitis and its relationship to sudden death addresses the diagnosis of acute pancreatitis, including hemorrhagic pancreatitis, and its differentiation from postmortem autolysis type changes, with diagnostic gross and histologic images. Dr. Katherine Callahan and I provide a critical evaluation of pancreatic injuries in children and an evidence-based look at which injuries are most specific for child abuse, with an illustrative case presentation. Finally, Dr. Theodore Brown and coauthor Dr. Joseph Prahlow discuss the utility of postmortem serum amylase and lipase testing in the diagnosis of pancreatitis.

Three articles focus on the liver, and injury and disease states highly relevant to forensic pathologists. Dr. Christopher Milroy reviews fatty liver disease, and tackles the question of whether "fatty liver" is a competent cause of death or has a direct role in sudden death. (Spoiler alert: Yes, fatty liver has been associated with sudden death; however, one should look closer for the exact mechanism and other related causes). Dr. Christopher Rogers presents a look at patterns of liver trauma, with a focus on appropriate documentation of injuries at autopsy in sufficient detail to provide the information needed by trauma surgery teams in their morbidity and mortality reviews and related scoring of the survivability of the patient's cumulative

injuries. This is an important collaboration between forensic pathology and clinical medicine. A review on various patterns and causes of hepatic necrosis, with excellent gross and microscopic photos, by Dr. Daniel Butler and coauthors Dr. David Lewin and Dr. Nicholas Batalis rounds out the coverage of the liver.

Finally, Laura Labay PhD, of NMS Laboratories, reviews the usefulness of bile in toxicology analysis. Bile is not a routinely tested matrix, and this article is useful in pointing out the occasions that bile may come in handy in the realm of forensic toxicology.

Having a journal with content that is of high quality, relevant, and timely, specific to forensic pathology, is extremely valuable to our specialty. Each issue is crafted by the efforts of our colleagues, and any coordinated endeavor of this scale takes much time and effort from all involved. My sincere thanks go to the authors in this issue, who kindly agreed to take time away from work, family, and other valued activities to create the invited, themed content in this issue for the edification of their colleagues near and far. For me personally, this has been a richly rewarding intellectual endeavor, and a fantastic opportunity to work more closely with colleagues well-known to me, as well as some I have gotten to know better through this process.

May your autopsy suites be well-lit, appropriately supplied, and very adequately staffed.