Editorial

A Life-Saving Cancer:

More on the Double Whammy

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The narrative on pages 112–113 of this issue[1] offers a compelling blend of elements—some purely of human interest, others exemplars of medical significance. In this editorial, I focus on 3 of the particularly intriguing medical elements.

Element #1: Two Simultaneous Killers

To have one intra-abdominal cancer is bad enough. But to have 2 of them simultaneously, both festering silently, is almost unheard of. And that's just the beginning.

Element #2: A Characteristic Presentation

The clinical silence ended with rapidly progressive abdominal pain, followed by collapse, hypotension, and computed tomographic evidence of large-volume hemoperitoneum and a small, rounded lesion in the liver. That rare combination of findings is characteristic of a liver tumor that has ruptured spontaneously and bled into the peritoneal cavity. The diagnostic possibilities in that circumstance consist of primary hepatic tumors—benign and malignant—and hepatic metastases. Of these, hepatocellular carcinoma (HCC) is by far the chief offender.[2-9]

Spontaneous rupture of an HCC has been recognized for centuries.[9] As in the case under review, HCC appears, at times, in the absence of underlying hepatic cirrhosis or chronic infection with hepatitis B or C.[4,5,7] In regions of the world where this neoplasm is prevalent, such as Southeast Asia and Japan, it ruptures in 12% to 15% of the patients[2] and is the cause of death in up to 50% of them.[7] Hepatocellular carcinoma does not occur as frequently in Western countries, but its incidence there is increasing,[7,10] due in part to the increasing prevalence of hepatitis B and C. The management of a ruptured HCC is discussed elsewhere.[6] Suffice it to say, if hepatic function is good and cirrhosis is absent, resection of the lesion (when feasible) is recommended[3,6,7] and offers a chance for cure.[6,8]

Unlike HCC, hepatic hemangiomas rarely rupture spontaneously.[11,12] In a large, retrospective, cross-sectional study of 1,067 patients with hepatic hemangiomas,[11] spontaneous rupture with bleeding occurred in only 5 patients (0.47%). These 5 patients had giant hemangiomas (main diameter, ≥4 cm) that were exophytic in type and peripheral in location. Four of the 5 patients presented with hemoperitoneum that needed emergency surgical intervention. In the 5th patient, the hemangioma bled into the hepatic parenchyma.

Hepatocellular adenoma (HA) is an uncommon-to-rare benign tumor of the liver whose reported incidence is fewer than 5 cases per million persons.[13] Its incidence is higher in glycogen-storage disease, diabetes mellitus, hemochromatosis, acromegaly, and in males who use anabolic steroids.[14] Spontaneous rupture of an HA with massive hemoperitoneum is distinctly infrequent,[13-18] and it is relatively rare in men.[13,18] Most patients with this complication are young women,[13-17] many of whom have a history of oral contraceptive use.[13,16,17]

Finally, metastatic lesions in the liver rarely rupture spontaneously and cause massive hemoperitoneum.[19-24] The primary tumors in such cases are diverse in location and cell type.

Element #3: Perfect Timing

The most influential and rewarding feature of this case was the timing of the initial bleed. At that crucial moment, the HCC was still small. Shortly thereafter, it was easily removed and presumably cured. Of equal or even more importance, the bleed led

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to the discovery of an early and unsuspected pancreatic cancer that was asymptomatic and amenable to surgical cure.

This, then, could turn out to be the first case in which one cancer, the HCC—by its own actions—prevented itself and a simultaneous pancreatic cancer from taking the patient's life. In other words, a well-known killer most likely became a life-saver!

Food for Thought

Imagine what might have happened had the HCC remained clinically silent a bit longer, at least long enough to enable the pancreatic cancer to declare itself. A work-up in that circumstance would have yielded a mass in the head of the pancreas together with an unexpected mass in the liver. Most clinicians, I believe, would assume the liver lesion to be a metastasis. There would be no reason to consider it as anything else, much less as another primary malignancy.

Any attempt at that point to predict the subsequent diagnostic and therapeutic measures would be speculation. One thing, however, is certain: symptomatic carcinoma of the pancreas is a serious disease with bleak prospects for long-term survival and little chance for cure. Fortunately, the pancreatic cancer in the case discussed here was resected before it wreaked any detectable damage. Moreover, 2 years after the patient's "double whammy," his tests show no evidence of disease, and he feels well.*

*Personal communication: Ellis Phillip Couch, March 2016

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