

Liver anatomy by Francis Glisson

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Francis Glisson (1598–1677) was born in Bristol and studied to become a doctor at Caius College, Cambridge, where he eventually was appointed as professor of medicine. He wrote the first monograph on the anatomy of the liver in his book *Anatomia Hepatis*, first published in 1654 in London, and later in Amsterdam in 1659 (1).

Whereas most anatomical treatises at that time only

showed external depictions of the liver, Glisson was the first to disclose the internal structure of the liver (2). He examined the venous structures and the network of bile ducts in the liver by injecting them with water or milk and then removing the liver tissue, thus creating a cast (Figure 1). In this way, he documented the intrahepatic network of blood vessels and bile ducts including the gallbladder and

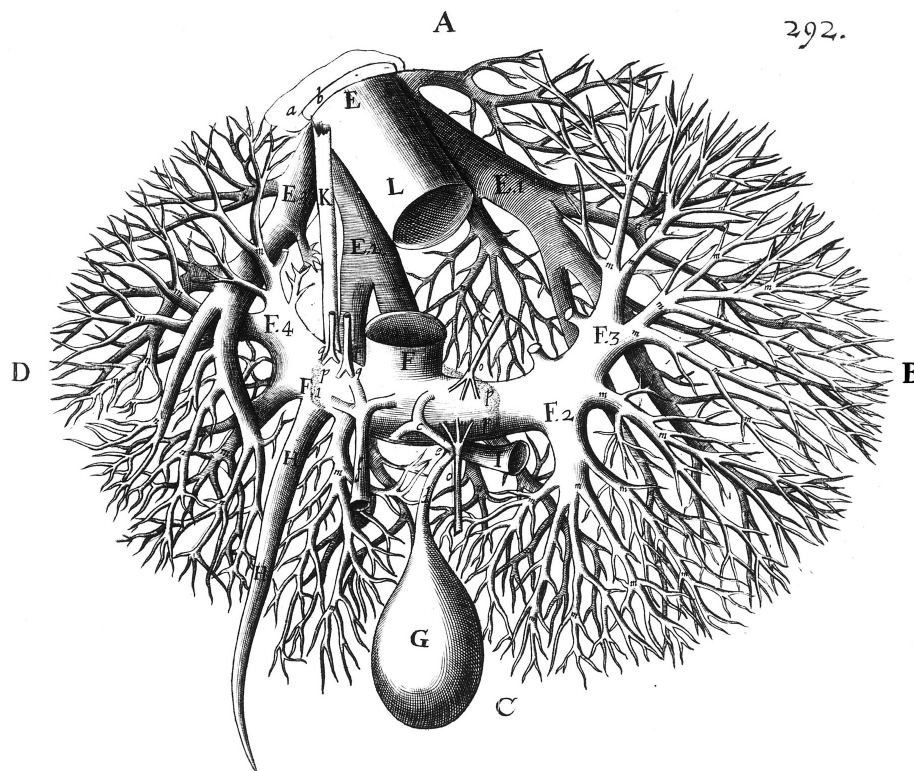


Figure 1 Illustration of the liver from Glisson's book, *Anatomia Hepatis* (in 1654), showing the internal blood vessels and bile ducts of the liver as he derived from three-dimensional casts.

the common bile duct up to the duodenum. He described a sphincter at the end of the bile duct in the duodenal wall ‘similar to the anal sphincter’, regulating the passage of bile into the duodenum. With this observation, Glisson preceded the note of the Italian Ruggero Oddi who described this sphincter 230 years later in 1887. Glisson thought the function of the liver was to produce warmth and to purify the blood by excretion of waste products into bile that would accumulate in the gallbladder acting as a reservoir. He was also right when describing the phenomenon of gallstones becoming lodged in the bile ducts and causing severe pain.

His name, however, was eponymously attached to the ‘fibrous capsule of Glisson’, defined as a thin layer of fibrous tissue surrounding the liver. He also described the extensions of the external capsule as sheaths following the vascular-biliary bundles into the liver as we now refer to with the Glissonian pedicle approach in liver resection (3). These sheaths were however already demonstrated by the Dutch physician Jan de Wale (Johannes Walaeus) in 1640, showing that in return to Oddi, eponyms not necessarily disclose the initial discoverer.

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