COMMENTARY

Cirrhosis: What else?

Cirrhose, quoi d’autre?

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Summary When the term cirrhosis was coined two centuries ago by Laennec, it designates by definition an end stage irreversible liver disease. Nowadays this word encompasses a whole range of disorders including some degree of reversibility for the early stage. It is therefore of prime importance to define the stages of the fibrotic process, based on the integration of knowledge about liver structure and function. In addition to morphological data, modern imaging techniques coupled to non-invasive biomarkers will probably help to better define and denominate this heterogeneous entity.

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It is likely that additional criteria will implement staging: imaging [8,9]: doppler US (detection of varices/shunts, ascites, flow direction, dysmorphism, etc.); CT-based texture analysis; diverse MR imaging-based techniques (Conventional contrast material-enhanced MR imaging, MR elastography, diffusion-weighted imaging, MR perfusion imaging); Non invasive tests: Blood tests (fibrotest).

HVPG: in decompensated cirrhosis, an HVPG > 20 mmHg is an important predictor of a poor outcome in the setting of acute variceal bleeding. Septa are independent predictors of the presence of clinically significant portal hypertension [2].

Laennec scoring identifies so far three stages depending on the thickness of the scars (4A, 4B, 4C) [1]; small nodularity and thick septa are independent predictors of the presence of clinically significant portal hypertension [1]. Biopsy, a long time goal standard in the diagnosis of cirrhosis, has definitely lost its main role for three major reasons (invasiveness, sampling error, absence of different steps in stage F4 (cirrhosis) of the widely used METAVIR scoring system) [4]. The hepatic venous pressure gradient (HVPG), an excellent semi-invasive approach is unfortunately not widely available. Non invasive tests are becoming widely used as a screening test to classify patients into two broad categories: absence or presence of significant fibrosis which includes cirrhosis. A major issue today is to assess the capability of non invasive tests to stage cirrhosis. It is anticipated that the combination of different approaches combining blood tests [4], elastometry [5] and US Doppler [6] would give the best results. Ultrasonographic

![Staging cirrhosis](Image)

Figure 1  Staging cirrhosis. VH: variceal hemorrhage.

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Figure is modified from Garcia-Tsao et al. [3]
elastometry (transient, real time) is an invaluable tool to measure rapidly liver elasticity, to detect cirrhosis and anticipate the occurrence of complications [7,8]. Unfortunately elasticity does not reflect — as too often forgotten — the amount of fibrosis and when it is so, it does not assess the whole liver. In that sense new imaging techniques could be in the future the most promising approach to assess cirrhotic stage [9,10].

We have to think of cirrhosis as a series of critical steps that, if left unchecked, culminate in hepatic decompensation. A better classification of cirrhosis will require integration of knowledge about liver structure and function [3]. Unfortunately the word cirrhosis masks the complexity of still poorly defined entities, as a consequence, staging of chronic liver diseases with significant fibrosis is required. Ultimately one may ask whether the term cirrhosis coined two centuries ago by Laennec to designate an end stage liver disease is still appropriate for the early steps of a process of still uncertain future.

Conflicts of interest
The authors have not declared any conflict of interest.

References