Hepatocellular carcinoma (HCC), which accounts for more than 90% of all primary liver cancers, affects more than 800,000 individuals annually and stands as the second cause of cancer-related death, worldwide. Unique of this typically inflammatory tumor, is its development in the context of readily identifiable environmental risk factors, like viral hepatitis B and C, alcohol and obesity, which theoretically would allow this lethal cancer to be curbed by strategies of primary and secondary prevention. This notwithstanding, HCC is on the raise in many geographical regions, often reflecting epidemics of viral hepatitis associated to either risk behaviors or poor sanitation, whereas, due to a lack of awareness, most patients are still detected with an advanced cancer disease that effects delivery of potentially curative therapies. Fighting against liver cancer, therefore, relies on an integrated approach that spans from the pillar represented by the implementation of strategies of primary prevention to the development of user friendly, effective drug regimens for patients with advanced HCC. In the last decade, many efforts have met with little success in developing therapies tailored upon the genetic profile and molecular subclass of the tumor, not to speak about the many failures to identify performant biomarkers for predicting treatment response. While further research is deemed necessary for similar scientific breakthroughs to materialize, other unmet medical needs in HCC research have emerged that challenge the community of caregivers, one above all how to scale up patient access to early diagnosis, which stands as the only pragmatic approach to cure HCC and currently relies on hospital-based programs of screening with abdominal ultrasound. Though, in an era of shortened organ donations, a cure from HCC caused by hepatitis B or C can also be attained with non-transplant options like open and laparoscopic hepatic resection and percutaneous local ablation, owing to the possibility of preventing liver decompensation and tumor recurrence with interferon-free antiviral therapy. On the other hand, in the liver transplant setting, direct antiviral agents have gained popularity, having cancelled recurrent hepatitis C that was responsible in one patient every three for shortened graft and patient survival whereas in many patients it was an hurdle for re-transplantation, too. As we move away from the ages when HCC was considered an inexorably fatal cancer, I am sure that the reading of this textbook will help appreciating the outstanding leaps forward that have been made by liver oncology with the contribution of all the authors listed here.

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