

Liver IV

Bridging or downstaging locally advanced HCC to LDLT

Chao-Long CHEN

With the recent advances in surgical techniques, locoregional and medical therapies in the management of HCC, prognosis of patients with HCC has tremendously improved. Liver transplantation has undoubtedly become the definitive standard treatment in providing the longest overall and recurrence-free survival when performed within one of many validated criteria. In Asia, where LDLT has been more widely accepted and has flourished, we have continuously explored and produced innovative surgical techniques that have effectively expanded not only the donor pool but likewise extended recipient indications for LDLT.

In recent 3 years, rather than excluding locally advanced HCC or with unfavorable histopathology, we have started to selectively utilize proton beam or Yttrium-90 radioembolization as an alternative locoregional therapy to bridge or downstage locally advanced or aggressive HCC to improve recurrence-free survival.

Our experience has demonstrated that down-staged HCC patients have similar survival outcomes to that of patients who initially fit the criteria. Attempts to achieve complete pathological response by loco-regional therapy before transplant may further improve recurrence-free survival.

Powerful modern locoregional therapies like proton beam and Y-90 combined with target and/or immunotherapy may effectively bridge or downstage locally advanced or aggressive HCC in preparation for timely LDLT, with promising survival outcomes in patients with otherwise dismal prognoses.