

## **When is liver transplantation futile and when potentially inappropriate?**

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**Lecture :** Transplantation of life-saving organs is the only chance for patients with organ failure that cannot be rescued by organ replacement therapies in the long term. Most current allocation policies of donor livers follow the principle of prioritizing the sickest patients. Although transplantation offers the only life-saving therapy for the sickest candidates, this policy may take the risk of losing the graft, the recipient, and another potential recipient who might drop out from the waiting list in the scenario of unsuccessful transplantation. The term futility is increasingly used for such scenarios; however, futility gives a clear message about the fatal treatment, which only applies to a very low percentage (1 out of 100). Therefore, futility in the context of organ transplantation is often incorrectly used. Liver transplantation of high-risk cases, which would work perhaps in 20%, cannot be considered as futile treatment but the risk of 80% is too high to proceed with liver transplantation especially in the light of organ shortage. In these scenarios, the term "potentially inappropriate treatment" should be used since it better reflects the balancing act of proceeding with a life-saving organ transplantation or passing the organ to another patient with a higher chance of survival. Beside established listing criteria, there is an urgent need for well-defined delisting criteria when a candidate is literally too sick for transplantation. An implementation of these criteria in allocation programs worldwide would help local decision committees to decide in such delicate situations of potentially inappropriate liver transplantation.

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