



Liver transplantation costs: Is it for the underprivileged?

Dear Editor,

Liver transplantation (LT) is the chief support for treating end-stage liver disease - hepatitis B/C-related cirrhosis, hepatocellular carcinoma, drug overdose, nonalcoholic fatty liver disease, and alcoholic liver disease.^[1] Although liver is the only regenerating organ capable of multitasking, it would have undergone major irreversible changes in these patients who are ideal candidates for LT. The immediate goal for such patients would be buying vital time. Patients who cannot afford to pay for LT, there is nothing much left except for damage control.

Patients when told about LT, the question that first comes up to their mind is how much does the procedure cost, life expectancy, success rate, quality of life with or without LT? Majority of these living donor LT procedures cost approximately about 20–30 lakhs in India as compared to Western countries where the cost is about 50 lakhs.^[2] However, this is just the cost of the procedure, while post-LT, these patients should be on long-term immunosuppression whose dose should be titrated to prevent rejection of organ.^[3] These drugs cost about 20–30,000/month or even more which the patient has to afford. These drugs being costly are difficult to be afforded and have major side effects. In some rare cases, it has been possible to stop these drugs after 2–3 years.^[4]

Outpatient visits and medicines are not covered by insurance. Hence, LT is difficult to afford for the underprivileged. Moreover, family member or first-degree relative has to donate a major portion of the liver which needs to match the recipient.

Although 10,000 LT are done every year all over the world, while our country needs about 30,000 livers out of which 1200 patients get it, rest perish without a LT.^[5,6] Majority of the patients are rarely told about life term costs of LT. Patients are even afraid to ask too many questions. Costs depend on hospital, procedure charges, consultation fee, medicines, diagnostics, etc.

Willingness to pay concept comes into picture where the risk to benefit needs to be assessed from patient to patient and in case of benefit outweighs risk, it is advisable to undergo LT. Many hospitals in India provide a package for LT, which comes with added benefits to the patient which covers the cost for screening, procedure costs, post-LT physician consultation fees, laboratory diagnostics fee, and follow-up care. However, indirect costs are not covered, namely transportation and stay near hospital. Patient relatives will have productivity losses since they need to take care of their near and dear ones for a prolonged period which incurs additional costs. The costs vary for individual patient on the basis of insurance and the type of transplant. They need to go ahead only if they can cope with the long-term expenses post transplantation.

Adherence is a major concern in long-term illness as nonadherence can complicate things.^[7] One needs to be under careful medical supervision with one hospital/doctor which will help avoid duplication of tests as one needs time to understand what is going wrong and then try medicines which might have been already given resulting in prolongation of hospital stay and loss of precious time. It is almost always difficult to find the best match in time. Success rate for LT is 80–90% with 1 year survival of 95% and 2 year survival of 80%.^[8] Majority of these patients are in their mid-50 where they will be having comorbid illness. This makes it more difficult in disease management. Finding the donor match and getting the transplant done in time proves to be the best gift of life.

Patients when put on waiting list for LT are left between life and death while doctors are buying time to find the best match. People die while waiting for a suitable liver, but about 86–90% of liver transplant recipients survive for at least 1 year.^[9] In spite of successful LT, patients often complain of reduction in endurance to carry out various activities post-LT.^[10] Hence, quality of life is a major concern with LT.

LT in many countries is down to economics. Time lost is never gained while doctors are trying to prolong life or prolonging death by increasing time left over from hours that to days to months and years. In LT patients who are gravely ill, doctors try to snatch back life from the brink of death, and then with the correct support, monitoring, interventions, and treatments,

restore them to a functional life. Usually, LT results in excellent short- and medium-term outcomes although rarely long-term. Those patients are lucky who come walking back through the doors of the Intensive Care Unit to offer thanks to doctors and their near and dear ones. For others with permanently failing organ systems, life-sustaining interventions do not work out while new complications keep arising, and recovery looks impossible. Patients often think of the irony, what kind of living is this? Perhaps need to be tolerated only if recovery being the final reward. Patients need to undergo LT provided they find a suitable donor match in time and only if they are ready to take on the added cost of follow-up care. For patients of age <40 LT is a life saving procedure. However, for the underprivileged looking at the current cost of procedure and treatment, LT looks unaffordable.

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