

## **Health-Related Quality of Life After Liver Transplantation: A Meta-Analysis**

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Abstract:

*Goal:* To assess health-related quality of life after liver transplantation.

*Materials and Methods:* Structured MEDLINE and Embase literature searches identified 5473 potentially relevant articles. Thirty-two additional references were collected from articles' bibliographies. Of the total 5505 identified articles, 49 studies reporting data on 3576 transplant recipients met our inclusion criteria: They included an assessment of quality of life in adult patients, reported either pre- and post-transplantation data or had a comparison group, and were written in English. We combined post-transplantation quality of life scores from 15 studies that reported data from the same quality of life scales to assess the magnitude of the effect of liver transplantation on quality of life scales. We also performed a sign-test on all 49 studies to evaluate the direction (positive or negative) of the effect of transplantation on quality of life.

*Findings:* Transplantation resulted in improvement of 32% in Karnofsky scores, 11% in Sickness Impact Profile scores, and a 20% to 50% in the domains of the Nottingham Health Profile. The sign test demonstrated significant improvement in post-transplantation physical health ( $p < 0.0004$ ), sexual functioning ( $p < 0.008$ ), daily activities ( $p < 0.02$ ), general HRQL ( $p < 0.02$ ), and social functioning ( $p < 0.05$ ); but not psychological health ( $p < 0.08$ ).

*Conclusions:* In general, the health-related quality of life of the 3576 patients was impaired pre- and improved post-transplantation. Recipients reported large gains in those aspects of quality of life most affected by physical health and smaller improvements in areas affected by psychological functioning.