

REVERSAL OF LIVER FIBROSIS: IS IT A REALITY?

SALIMUR RAHMAN

*Former Professor, Department of Hepatology, Bangabandhu Sheikh Mujib Medical University, Dhaka, Bangladesh
Email: salimur51@yahoo.com*

Liver fibrosis, previously deemed irreversible in the context of chronic liver injury, is now being reconsidered due to emerging evidence suggesting the potential for regression and even reversal. This shift challenges traditional notions and prompts exploration into interventions targeting reversal of liver fibrosis. A thorough review of literature spanning 2000 to 2024 was conducted via PubMed, MEDLINE, and Embase databases. Clinical trials, longitudinal studies, and experimental research focusing on fibrosis reversal interventions were analyzed. Data extraction emphasized study design, patient demographics, interventions, outcomes, and key findings regarding fibrosis regression. Diverse interventions across liver diseases have shown efficacy in liver fibrosis regression. Antiviral therapies such as nucleoside/nucleotide analogs (entecavir, tenofovir), interferons, and direct-acting antiviral agents (sofosbuvir, glecaprevir/pibrentasvir), treatment of other causes (Wilson's disease, haemochromatosis, autoimmune hepatitis) have demonstrated halting or reversal of fibrosis progression. Lifestyle modifications, surgical interventions including liver transplantation and bariatric surgery, led to significant fibrosis regression. Certain herbal supplements (e.g., silymarin, curcumin, Schisandrachinensis etc.) exhibited potential antifibrotic properties. Probiotics, though needing further investigation, seems promising in modulating gut microbiota and reducing liver inflammation. Novel strategies like dopamine receptor stimulation and pathogen clearance are other recent advancements in fibrosis reversal.

Evidence supports the feasibility of reversing liver fibrosis in chronic liver diseases. While antiviral therapies, treatment of cause, lifestyle modifications, and surgeries remain crucial, herbal supplements, probiotics, and emerging strategies offer adjunctive therapies. Advances like dopamine receptor-targeting drugs and gene therapy present new treatment avenues while instilling renewed hope for patients with liver fibrosis.

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