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**Milk fat globule-epidermal growth factor 8 (MFGE8) prevents intestinal fibrosis**

Lin S, Wang J, Mukherjee PK, et al. [Milk fat globule-epidermal growth factor 8 (MFGE8) prevents intestinal fibrosis.](https://gut.bmj.com/content/73/7/1110) Gut 2024; doi: 10.1136/gutjnl-2022-328608.

Intestinal fibrosis is considered to be an inevitable consequence of chronic, progressive inflammation over time in Crohn’s disease. While there are increasingly many treatment options for inflammation, the medication landscape for treating fibrotic disease currently remains empty. However, there has been increasing appreciation of role played by the extracellular matrix (ECM) in regulating mesenchymal cells (MSCs) and subsequent fibrosis.

In this publication, Lin et al., sought to characterise the composition and function of the ECM in patients with fibrostenosing Crohn’s disease and in control patients. Full-thickness intestinal tissues were decellularised and then assessed using three different protocols. The ECM composition in different tissues was assessed using proteomics, and then subsequently validated by immunohistochemistry and quantitative polymerase chain reaction (qPCR). Primary human intestinal fibroblasts were treated with milk fat globule-epidermal growth factor 8 (MFGE8) in two models of intestinal fibrosis.

After establishing the most optimal protocol for decellularisation of tissues from patients with Crohn’s disease, Lin et al., showed in their matrisome analyses that MFGE8 was elevated in fibrostenotic tissues, and this was also confirmed at protein and messenger RNA (mRNA) level. Treating tissues with MFGE8 inhibited ECM production in primary human intestinal myofibroblasts from control patients but not from patients with Crohn’s disease.

This study provides important clues about aetiopathology of fibrostenotic disease in Crohn’s disease. In particular, MFGE8 both prevented and reversed intestinal fibrosis in experimental models in-vitro and in-vivo, suggesting this may be a potentially exciting novel therapeutic agent to assess for potential benefits in future studies of stricturing Crohn’s disease.