Evolution of Iron Treatment

From Ancient Remedies to Modern Innovations

Ancient Civilizations
2000 BCE – 500 CE

Use of iron-rich foods, herbs and natural minerals to treat weakness and anemia.

17th Century
1620s

Thomas Sydenham recommends "**steel medicines**" (iron preparations) for chlorosis (anemia).

19th Century
1830s

Pierre Blaud develops **Blaud's Pill** (ferrous carbonate) – the first widely used iron medication.

Early 20th Century
1900s

Introduction of parenteral (IV/IM) iron preparations (iron dextran).

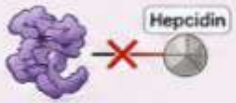
Mid–Late 20th Century
1950s–1990s

Development of safer IV iron formulations – iron sucrose, ferric gluconate – with better tolerability and safety.

21st Century
2000s–2020s

New-generation IV irons allow higher single doses, fewer infusions, and rapid iron repletion with improved safety.

The Future of Iron Therapy



Hepcidin Modulators

Drugs that block hepcidin or enhance ferroportin to improve iron availability.

HIF-PH Inhibitors

Oral agents that stimulate natural EPO production and lower hepcidin, improving iron utilization.

New ESAs & Long-Acting Agents

Next-generation erythropoiesis-stimulating agents for effective anemia management with less frequent dosing.

Nanotechnology & Targeted Iron

Advanced iron delivery systems for better absorption, fewer side effects, and targeted therapy.

Biomarker-Guided Therapy

Use of hepcidin, sTFR, Ret-He and other biomarkers for personalized iron therapy.

Personalized & Precision Care

Tailored treatment based on patient needs, genetics, inflammation and iron metabolism.

★ **From natural remedies to precision medicine – Iron therapy continues to evolve for better outcomes.**

ECNG

Extracorporeal Nephrology Group

An Academic Forum for Nephrologists, DM Trainees, Physicians, and Healthcare Professionals

> *"Knowledge grows when shared, wisdom deepens when discussed."*

WEEKLY ONLINE ACADEMIC DISCUSSIONS

DATE	TIME	PLATFORM	REGISTRATION
22/6/26	9–10 PM	ZOOM MEETING	NO REGISTRATION