

History in Nephrology

True Legends never die – its legacy lives on.!

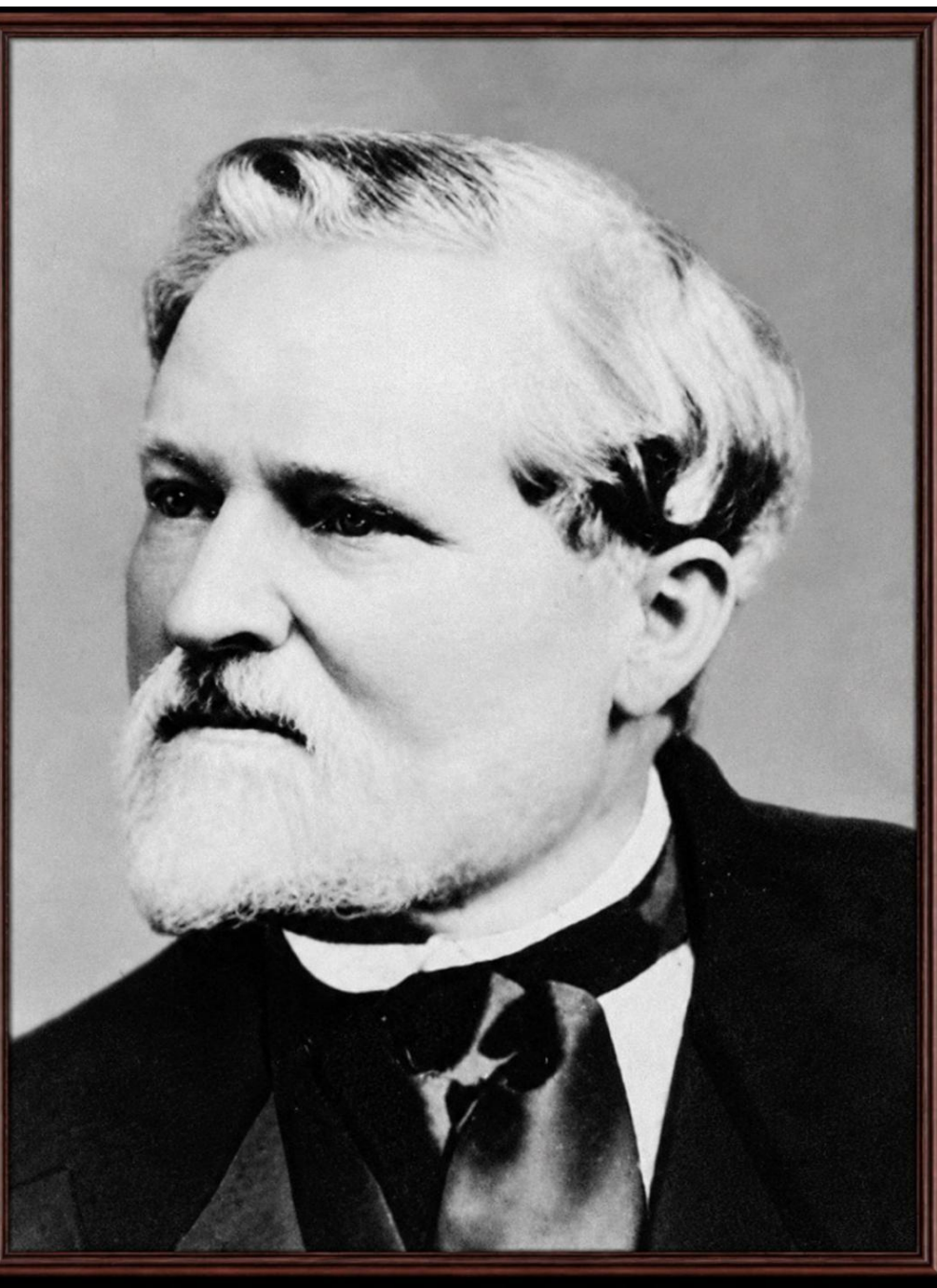
Iron Treatment

- **Dr. Thomas Sydenham**
- **Dr. Pierre Bland**



Thomas Sydenham (1624 – 1689)

The “English Hippocrates”, was among the first physicians to champion iron (‘steel) preparations for chlorosis, establishing one of the earliest clinical uses of iron in the treatment of anemia



Pierre Blaud (1832)

“Pierre Blaud’s introduction of Blaud’s Pill in 1832 marked the birth of standardized oral iron therapy and revolutionized the treatment of iron – deficiency anemia”.

Thomas Sydenham (17th Century) – Advocated “steel” preparations for chlorosis based on clinical observation.

Pierre Blaud (1832) – introduced Blaud’s Pill, the first widely used standardized oral iron therapy.

Late 19th – 20th centuries – Development of purified ferrous salts and improved oral iron preparations.

Mid – 20th century onward – introduction of intravenous iron formulations.

21st century – Modern IV iron therapies such as Ferric Carboxymaltos, Ferric Derisomaltose, and Ferumoxytol.

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.