Niels Ryberg Finsen: Healing with sunlight (1903)

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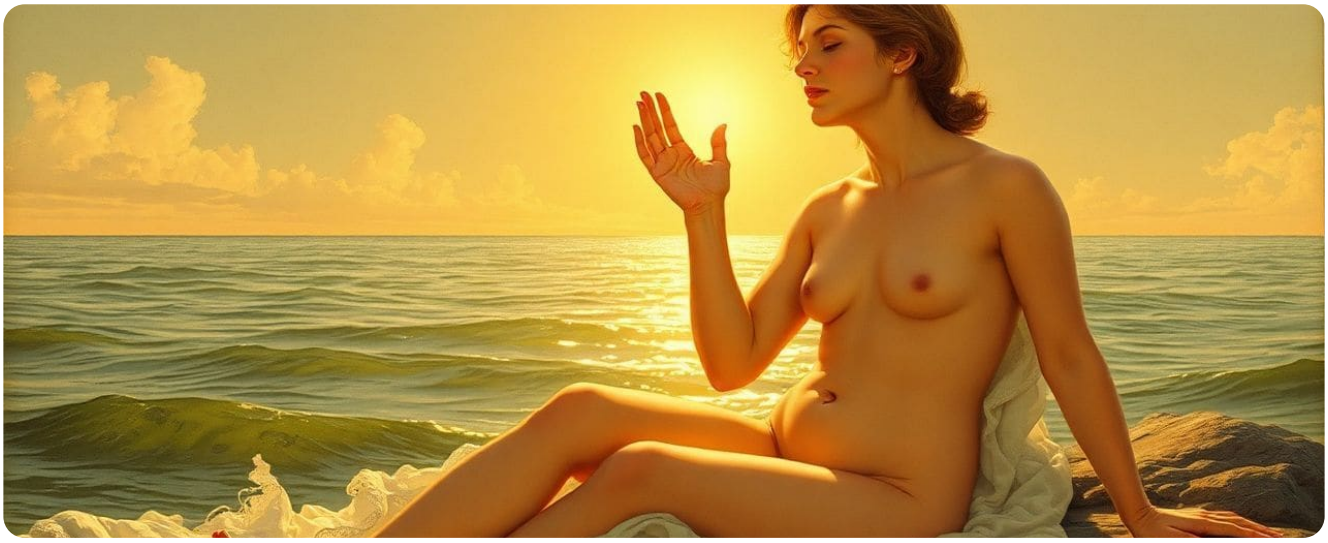

In a small village in the Faroe Islands, a seven-year-old boy watched through the window as sunlight pierced through the gray northern clouds. Decades later, the same man would win the Nobel Prize but would never see the sun directly. Niels Ryberg Finsen, the first Scandinavian medical scandal, forever changed how we understand light, disease, and the human body.

It was 1893 in Copenhagen. A young doctor of 33, son of a whale merchant, observed something no one had taken seriously: patients with cutaneous tuberculosis —horrible wounds that devoured faces and bodies— improved when exposed to the sun. It wasn't magic. It was light. But what kind of light? And more importantly: why?

- He studied medicine at the University of Copenhagen and worked at the city's hospital.
- He began his experiments in 1893, obsessed with the idea that sunlight had healing powers.
- He designed a device that concentrated light and directed it specifically toward skin lesions.

Patients arrived with faces disfigured by ulcers that no treatment could cure. Within weeks, under his concentrated light, the wounds began to close. Incredulous doctors looked at their own hands. How was it possible that something as simple as light could do what no medication could achieve?

What did sunlight have that doctors had ignored for centuries?

The child who grew up in darkness

Niels Ryberg Finsen was born on December 29, 1860 in Thorshavn, the capital of the Faroe Islands, an archipelago between Norway and Iceland where winter sun barely appears for a few hours. That light isolation would be an irony of fate: the man who would revolutionize medicine with light grew up in a place where light was scarce.

But Finsen's life was not easy. From a young age he suffered from a chronic illness —historians debate whether it was a liver or heart condition— that would accompany him all his life. At 24, already a medical student in Copenhagen, his health deteriorated seriously. Doctors recommended rest, away from stress. Finsen, stubborn like all those obsessed with a discovery, ignored the advice and kept researching.

The discovery no one wanted to believe

It all began with a casual observation. Finsen noticed that patients with cutaneous tuberculosis —a horrible disease known as lupus vulgaris— who were exposed to sunlight improved visibly. The lesions on their skin, which normally advanced destroying tissue, stabilized and eventually healed.

The medical community of the time laughed at him. «Sunlight curing diseases? This is medieval witchcraft», said an article published in 1895 in a German medical journal. Finsen did not give up. In 1896 he published his first results: of 27 patients treated, 14 had completely cured and another 6 had improved significantly.

But how did it work? Finsen wasn't sure, but he had a hunch: it wasn't all light, but certain types of rays that had the power to heal. To prove it, he developed a device that filtered and concentrated light at a single point. It was like creating a sniper of light that could aim directly at lesions.

The violet light that changed everything

Finsen's experiments demonstrated something extraordinary: the violet and blue rays of the solar spectrum were the ones with healing properties. Infrared rays —the ones that heat— didn't work. Ultraviolet rays —the ones that burn— were damaging. Only a specific band of the visible spectrum worked.

This was revolutionary because it contradicted everything doctors believed. Until then, it was thought that heat was the therapeutic factor of any treatment. Finsen showed that no: light, without heat, could heal.

By 1901, his treatment had spread throughout Europe. Hospitals installed his equipment. patients traveled kilometers to receive their «phototherapy» sessions, as he called it. In France, Germany, England, doctors who had previously mocked now applied Finsen's treatment to thousands of patients.

The Nobel that came too late

In 1903, the Swedish Academy of the Karolinska Institutet gave him the Nobel Prize in Physiology or Medicine. Finsen was the first Nordic citizen to receive it. The honor was absolute. But tragedy was lurking: Finsen was too ill to receive the prize in person. His chronic illness had advanced. He died on September 24, 1904, just a year after receiving the Nobel, he was only 43 years old.

What had begun as a casual observation —patients improving when taking sun— had become the first therapy based on the physics of light. Today, more than a century later, phototherapy is still used: to treat psoriasis, jaundice in newborns, certain depressions, and even some forms of cancer.

The legacy of light

Finsen demonstrated something that goes beyond medicine: that sometimes the deepest answers are in front of us, waiting for us to see them. The sun that illuminated the Faroe Islands where he was born contained, without anyone knowing, the power to heal.

His story also reminds us that science is not a sprint, but a marathon of patience. Finsen took more than ten years to convince the world. He died young, but his light —that violet light he sought so much— still shines in today's hospitals.