Compound E and the Discovery of Cortisone

In the early 1920s, animal research at Mayo Clinic\(^1\) led to the discovery of cortisone. This research was first published in the *Proceedings of the Staff Meeting of the Mayo Clinic* in 1949,\(^2\)\(^3\)\(^4\) leading to the receipt of the Nobel Prize in Medicine in 1950.\(^4\)

Dr Edward Kendall, a biochemist interested in endocrinologic disorders, with the assistance of Drs Phillip Hench and Charles Slocum, extensively researched the adrenal gland. He is noted to have purchased significant amounts of adrenal glands during his research.\(^1\) Interestingly, during a renovation in a house in Northeast Rochester, some sub-floor boards were discovered that contained the following statement inked on it: “Beef suprarenal glands, EC Kendall,” so obviously, he was buying them by the crateful (personal experience). In the early stages of the research, several compounds were extracted, and titled A, B, C, D, E, and F. Partially, this research was fueled by the war. Rumors that the German Luftwaffe were injecting their pilots with Compound E to increase their ability to fly at higher altitudes provided some impetus to the research.\(^2\) The research was hindered by the inability to synthesize adequate amounts of the compound, but with the aid of Merck & Co, better processes were developed.\(^2\)

First studies involved the injection of 14 patients with Compound E, which gave almost immediate results for alleviation of rheumatoid arthritis, but which subsided once the injections were stopped.\(^3\) As is known, this research led to the receipt of the Nobel Prize in Physiology and Medicine. Dr Kendall shared the details of the trip to Sweden to receive the award in the August 1951 issue of the *Proceedings of the Staff Meetings*, which includes descriptions of the rooms, dignitaries, and news coverage. One newspaper took interest in the fact that Dr Kendall included his mother-in-law in the trip.\(^4\)

References