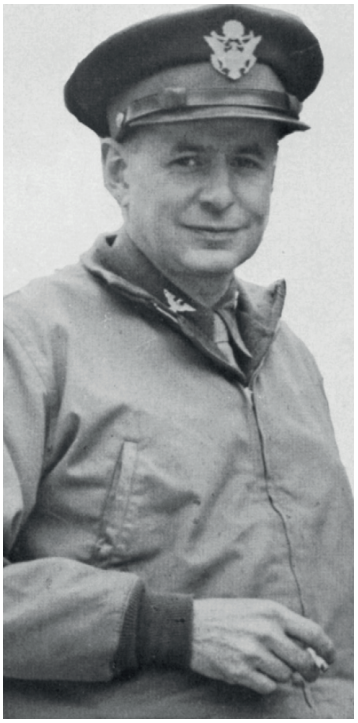
Edward Delos Churchill and the wound care pandemic



Colonel Churchill (© The American Association for Thoracic Surgery; adapted from Wright, 2012)

EDWARD WHITE
Freelance Medical Writer, Switzerland

We are all abundantly aware that we are experiencing an unprecedented period in global history, and 2020 will forever be remembered for the emergence of the Coronavirus pandemic. Until recently, COVID-19 was an unknown quantity, hitherto without place in the popular consciousness, and certainly without mention in every industry journal from 3D printing to wound care. Of course these are unprecedented events, but lest we get ahead of ourselves, pandemics have afflicted the world before.

The deadliest pandemic in history, the so-called 'Spanish Flu' of 1918, infected some half a billion people, killing anywhere between 20 and 50 million, even at a conservative estimation. Then, as now, schools and businesses were closed, individuals were ordered to wear masks, and the unforeseen arrival of the novel virus strain meant that no vaccine or effective medication existed.

Here within the purview of Wounds UK, we ask whether there has ever been a wound care pandemic. Perhaps surprisingly, there has indeed. Whilst internet search engines now interpret 'pandemic' as being synonymous with COVID-19, digging a little deeper unearths some interesting historical perspectives.

One individual in particular used the term pandemic in relation to wound care, and it is upon his commentaries which we now turn our attention. Edward Delos Churchill (1895–1972) was a pioneering American surgeon who rose to prominence through his work in thoracic surgery, later becoming President of the American Surgical Association, before eventually turning his attention to wound care and infection.

Quite literally terming the situation, and thence his publication The Pandemic of Wound Infection in Hospitals, Churchill described a perfect storm of socio-economic factors which all combined to produce a truly grave scenario some 250 years ago: *"A tidal wave in the incidence of infection and suppuration of wounds began to rise in the eighteenth century and reached an alarming height in the third quarter of the nineteenth century."* (Churchill, 1965).

Why was this so? Despite the work of Semmelweiss, Pasteur, Koch and others, the world had not yet accepted germ theory, and a number of factors coincided to create this 'tidal wave' of infection. As a result of new weaponry and a more humanitarian battlefield ethos, a greater number of injured personnel found themselves evacuated to military hospitals than ever before.

The advent of hospitals in major European cities coincided with population expansion and the industrial revolution, along with *"the crowding of sick and injured into these hospitals before even the rudiments of individual isolation precautions against the transference of infection from person to person were understood"* (ibid).

Evidently, one for a highly quotable turn of phrase, Churchill neatly describes the ideal situation for infection to spread like wildfire. As we have seen in many previous editions of this column, surgeons, especially those of a military nature, have until recently been largely responsible for the management and development of wound care throughout history. Alas the wound care pandemic of the nineteenth century grew to such an extent that all efforts on their part were entirely vitiated: *"[they] failed both in theory and in practice…despite all adaptive changes in procedures that were devised".*

At a time when the fantastically confusing misnomer of 'social distancing' has become part of the global lexicon, perhaps Churchill's pithy yet accurate *"individual isolation precautions against transference of infection"* would have been preferred. WUK

REFERENCES

Churchill ED (1965) The pandemic of wound infection in hospitals: studies in the history of wound healing. *J Hist Med Allied Sci* 20(4): 390–404

Faguet GB (2008) *The War on Cancer: An Anatomy of Failure, A Blueprint for the Future*. Springer Science+Business Media.

Morabia A (1996). P. C. A. Louis and the birth of clinical epidemiology. *J Clin Epidemiol* 49(12):1327-33

Ray JG (2002) Judging the judges: the role of journal editors. *QJM: An International Journal of Medicine* 95(12): 769–74

Vandenbroucke JP (1998) 175th anniversary lecture. Medical journals and the shaping of medical knowledge. *Lancet* 352(9145): 2001–6

Wright CD (2012) Historical perspectives of The American Association for Thoracic Surgery: Edward D. Churchill (1895–1972). *J Thorac Cardiovasc Surg* 143 (1): 1–3