

# The murky beginnings of the moist wound healing movement

The previous instalment of *From the Archives*, published in June, caught what we had hoped would be the downward trend of the coronavirus outbreak, as global containment measures worked to prevent an inexorable rise in cases. Unfortunately, we are still in the midst of the pandemic. However, with sufficient column inches dedicated to COVID-19 to encircle the globe, we will turn our attention to two individuals from the recent vaults of wound care history. One carried out seemingly forgotten work which laid the path for a wound healing revolution, while the other followed shortly after with a publication output that may constitute a world record.

The importance of a moist wound healing milieu has long been common knowledge among wound care professionals, and the work of George Winter in 1962 is acknowledged as the landmark study which kick-started the moist wound healing movement. Winter described treatment of partial-thickness wounds in pigs, observing an almost 50% increase in the epithelialisation rate for wounds occluded with polyethylene film, as opposed to wounds left to desiccate in the open air. It has justifiably been heralded as a seminal study which has changed the course of wound care for ever after.

However, the archives suggest that Winter was not the first to study the effect of occlusion on wound healing rates, with the dissertation of one Oscar Gilje, published in 1948, being the inaugural publication in this area. Hailing from Sweden, Gilje studied the effects of occlusion on venous ulcers, observing that those treated with adhesive tape exhibited dramatic healing results compared with those that were not occluded (Gilje 1948; Ovington 2002).

Unfortunately for Oscar and his ulcer patients, the dearth of adequate dressing materials at the time meant that his research had little impact on clinical practice; the tape could occlude a wound and keep it moist, but fundamentally lacked absorbency. Contrarily, the absorbent materials available at the time could not maintain a moist wound healing environment and there the matter ended. Such are cruelties of history.

Thus it was up to Winter to change the course

of wound care some 14 years later. It cannot be overlooked that Winter used a porcine model and as similar as the characteristics may be to human skin (porcine xenografts are of course used today), the question should be asked: did anyone repeat Winter's study on humans? If so, whom?

The answer is Professor Howard Maibach. With an entry in Wikipedia covering the scantest details, Maibach had published over 2,400 research articles as of 2013 (TDSC, 2013), when he was awarded The Master Dermatologist Award by The American Academy of Dermatology (AAD).

Born in 1929, and by all evidence, still prodigious to this day, Dr Maibach has devoted his extensive career primarily to the investigation of contact and occupational dermatitis, after several false starts by way of a degree in political science, and three semesters of anthropology (Smith 2008). To put his career in some degree of perspective, 2021 will mark Dr Maibach's 60th year as a member of the AAD, and the 57th year of his membership of the American Medical Association, and the American College of Physicians; the two largest physician bodies in the US.

Is there a conclusion to be drawn from this brief retrospective? Perhaps only as a cautionary reminder of the fickleness of history and record-keeping; of the trio mentioned, only Winter's name rings truly familiar (to this author at least).

Journals and archives concern themselves with key breakthroughs and notable accomplishments, but as has been demonstrated so often before, a fascinating story lives behind the scenes. WUK

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