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Hyperbaric oxygen therapy plays a key role in the development of wound care center in Taiwan

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Wound care is now recognized as an interdisciplinary approach to problem or chronic wounds. Integration of different experts into wound care, including infection physician, endocrinologist, vascular surgeon, plastic surgeon, nutritionist, wound care nurse specialist, etc., is one important point to the success of wound center development. Hyperbaric oxygen (HBO) treatment, a proved powerful adjuvant therapy in wound healing, plays a key role in the establishment of wound care center. During the treatment course of HBO, patients can receive regular follow up for wound evaluation as well as wound dressing change. Treatment strategies can also be adjusted or modified accordingly without delay. Interdisciplinary consultation and meeting can also be held frequently.

In Taiwan, there are about 35 multi-chamber HBO centers. About one fourth of the centers focused on problem wound and the number is still increasing. Our wound care center, hyperbaric oxygen treatment and wound care center in Shuang-Ho Hospital, is a newly established HBO center focused on wound care in Taiwan. The characteristics of our center are multidisciplinary wound care team, individualized wound care treatment plan and smartphone-based telemedicine. Our wound care team includes plastic surgeon, vascular surgeon, cardiovascular physician, endocrinologist, infection physician and wound care nursing staff, etc. Weekly case discussion and bi-weekly interdisciplinary meeting are held consistently. Every patient visited our center will be suggested an individualized treatment plan for wound healing recorded in a “wound care passport”. The patient can involve more into their treatment progress by checking one’s own “passport” at hand. The “smart-phone based telemedicine”, with the help of worldwide increasing popularity of smartphone, is a newly developed system for real-time interaction between patients and medical staffs. Patient can send the pictures of wound taken from their smartphone to our wound care data base. And our medical staff will advise adequate management to patient or family immediately online (Fig 1). It will not only improve the compliance of patients and also save more time and labor especially for disabled patients. Besides, we also established a blog and forum of our wound care center for education and discussion with patient and their family (Fig 2). All those characteristics are derived from “patient-oriented” concept. On HBO treatment course, patient can receive other ancillary treatments or dressing change at the same time in our center. After HBO treatment course, patient can finish their wound care treatment in our center or receive online follow-ups by “smart-phone based telemedicine” till the wound heals.

Though the HBO treatments to improve wound healing is not covered by public health insurance in Taiwan, the number of patients came for this indication is increasing greatly. We believe and hope that our model of hyperbaric oxygen and wound care center is helpful to facilitate wound healing and also improve patient care.

**Smartphone-based Telemedicine**

![Smartphone-based Telemedicine](http://i-woundcare.com/blog)

**Fig 1. Smart-phone based telemedicine to facilitate wound care.**

**Fig 2. “Wound-care blog” for education and discussion with patient and their family.**
(http://i-woundcare.com/blog)