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LETTER TO THE EDITOR

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Challenges in the management of critical ill COVID-19 patients with pressure ulcer

Dear Editors,

Coronavirus disease 2019 (COVID-19) has spread exponentially throughout the world. Current reports from United States and Italy suggest that the proportion of ICU admissions should be between 5% and 12% of the total cases, with high rate of the aged and mechanically ventilated.[1,2] As we know, the development of a pressure ulcer is a complex process that requires the application of external force to the skin (such as sacrum and ischium) and host-specific factors, especially in the patients over age 65 years old and with critical ill condition. The most important risk factors include immobility and reduced perfusion which are also the features of critical ill COVID-19 patients. Unlike usual condition, COVID-19 is highly contagious, especially among medical staff. For patients with stage II or above pressure ulcers, the costs of medical resource increases significantly in our hospital. Meanwhile, patients on mechanical ventilation are difficult to turn, and the risk of medical care exposure infection increases. In addition, diarrhoea is one of the common (2%-49.5%) symptoms of COVID-19,[3] and could also contribute to the occurrence of sacral pressure ulcer in ICU patients.[4] The sacral pressure ulcer is also very susceptible to contamination by faeces. Unfortunately, faecal excretion persisted after sputum excretion in 23% to 82% patients for 1–11 days, suggesting that the faeces of COVID-19 patients are potentially infectious.[3] Therefore, how we can primarily prevent and appropriately manage the COVID-19 patients in ICU with pressure ulcer is an important issue. We address several points according to our experience during the pandemic.

- Improve underlying contributing factors, such as anti-shock therapy to ameliorate skin perfusion.
- Provide pressure redistribution with proper positioning and appropriate use of pressure-reducing devices.
- Improve mobility (such as increased physical therapy and decreased use of sedatives), minimising excess moisture, and correcting malnutrition.
- Strengthen the preventive education of pressure sores for medical staff.
- Close daily monitoring of the pressure ulcer, the dressing, the surrounding skin, and any possible complications.
- For stage 1, treatment should focus on preventive measures and wound protection. For stage 2, dressings are required to maintain a moist wound environment. For stages 3 and 4, treatment consists of available wound infection, debridement of necrotic tissue, and appropriate dressings.
- Medicaid may cover partial additional payments when patients with COVID-19 in ICU develop stage 3 or 4 during the pandemic in United States.[5]

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CONFLICT OF INTEREST

All the authors declared no conflicts of interest.

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