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Wearing the N95 mask with a plastic handle reduces pressure injury

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SURGICAL CHALLENGE

An outbreak of the 2019 novel coronavirus diseases (COVID-19) in Wuhan, China, has spread quickly worldwide and was recently declared a pandemic by the World Health Organization. Among the infection prevention measures for health care workers, wearing a medical N95 face mask properly is important. However, using an ear loop-style N95 face mask for a long time can cause pressure injury on the skin of the ear (Fig 1, A) that may cause people to adjust the mask constantly, putting them at higher risk of infection.

THE SOLUTION

A plastic handle (Fig 1, B) can be used in conjunction with the ear loop-style N95 mask to solve this problem. First wear the mask according to its instruction. And then hook elastic bands of the mask to each side of the handle from behind, respectively. Next, fix the plastic handle in the middle of the occipital bone (Fig 1, C) and adjust both sides of the ear band to avoid pressing the skin. In our experience, it does not compromise the fit of the mask.

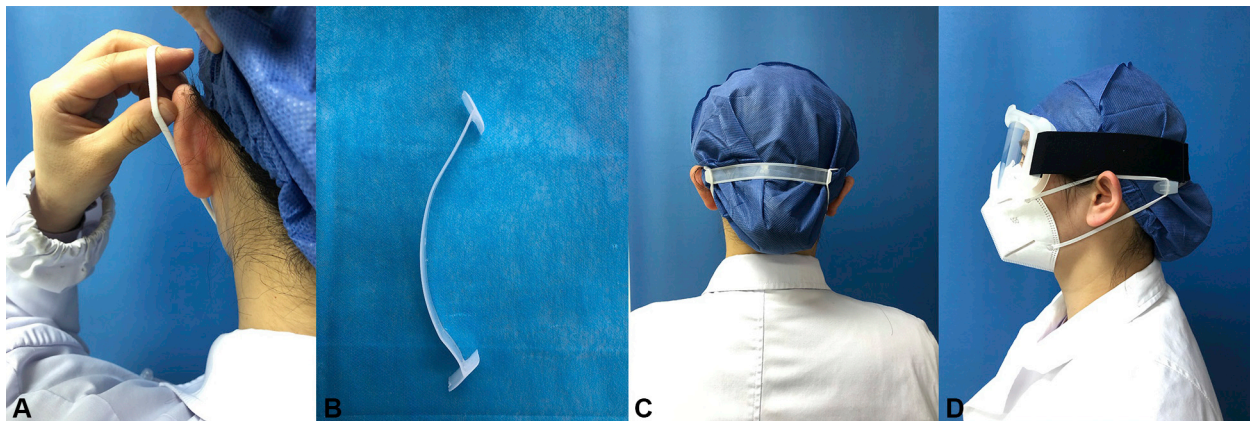


Fig 1. (A) Pressure injury on skin of the auricle. (B) A sample of a plastic handle. (C) The handle with bilateral ear bands fixed on the occipital bone. (D) Side view of the mask held in place with the plastic handle.

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This method has 2 advantages. First it is simple and easy to operate, making the mask comfortable to wear (Fig 1, *D*), avoiding uncomfortable and injury, and moreover, making the mask space more airtight. Second, the plastic handle is relatively easy to obtain and can be reused after being disinfected by 75% alcohol or chlorine-containing disinfectant.