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The novel application of a tourniquet for reducing medical device–related pressure on the ears



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SURGICAL CHALLENGE

The 2019 novel coronavirus broke out and spread worldwide quickly, leading to serious infection and the deaths of many people. To prevent and control this disease, it is especially important for health care workers to wear ear-looped face masks and spectacles to cut off transmission routes and protect themselves. However, there is a strong possibility of generating medical device–related pressure injuries on the ears when wearing protective equipment for a long time, putting users at higher risks of ulcers and infection.

SOLUTION

A novel application of a tourniquet (Fig 1) for reducing pressure injury on the ears can be used to solve this problem. First, cut a clean tourniquet into 4 pieces and set 2 of them on the spectacles frames. Second, cut



Fig 1. A health care worker is wearing both an ear-looped face mask and spectacles with the novel application of a tourniquet.

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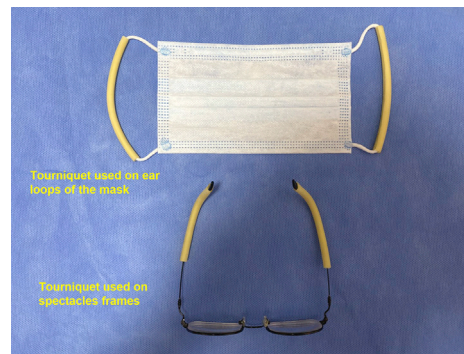


Fig 2. The 4 segments of 1 tourniquet are set on ear loops of a face mask and spectacles frames.

through the other 2 segments and set them on the ear loops of the face mask (Fig 2).

This method has 3 advantages. First, it is simple and inexpensive to obtain the tourniquet, which can be disinfected with 75% alcohol repeatedly. Second, the tourniquet can largely relieve the pressure of face masks and spectacles on the ears, making users feel relatively comfortable. Third, the tourniquet increases the friction force between the ears and protective equipment, to a large extent preventing ear-looped face masks and spectacles from slipping off easily.