Symmetrical femoral vein bubble caused by decompression illness

A 76-year-old man was admitted to a nearby hospital for paralysis of the lower half of the body after a diving accident. Decompression illness was suspected, and he was treated with hyperbaric oxygen therapy (HBOT). However, he immediately developed convulsions; therefore, HBOT was discontinued and he was transferred to the intensive care unit of our hospital. On arrival, he did not breathe spontaneously, and his level of consciousness as defined by the Glasgow coma scale was 3 (E1V1M1). Because his general condition was extremely bad, we could not use HBOT. However, he subsequently started



Figure 1 Symmetrical femoral vein bubbles in plain CT.

breathing spontaneously without ventilator support, and he was discharged.

The initial plain CT before treatment in our hospital showed a symmetrical femoral vein bubble (figure 1). Other arteries or veins did not show any gas density, and the bilateral femoral vein showed only one intravascular bubble, although almost all decompression illness cases show multiple bubbles.

The reason for symmetrical solitary femoral bubbles is unknown; however, we presume the mechanism for the femoral vein bubble is slow blood flow like deep vein thrombosis.

Symmetrical femoral vein bubbles may be a useful initial CT indicator in decompression illness.

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