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IMAGES IN INTENSIVE MEDICINE

Cardiogenic shock secondary to severe carbon monoxide poisoning

Shock cardiogénico secundario a intoxicación grave por monóxido de carbono

J.F. Muñoz Moreno*, E. Rubio Prieto, R. Ortiz Díaz-Miguel

Servicio de Medicina Intensiva, Hospital General Universitario de Ciudad Real, Ciudad Real, Spain

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A 53-year-old male was admitted to the Intensive Care Unit with cardiogenic shock secondary to severe carbon monoxide poisoning. Treatment was started with 100% O_2 due to initial carboxyhemoglobin levels of 25%. Echocardiography was performed due to sustained hypotension despite resuscitation and vasoactive drugs (Appendix B enclosed video, left), revealing severe biventricular dysfunction with an estimated cardiac output of 1.8 L/min that gradually recovered in the subsequent 48 h with inotropic support in the form of dobutamine (Appendix B enclosed video, right).

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* Corresponding author.
E-mail address: juanfran9juanfran9@gmail.com (J.F. Muñoz Moreno).

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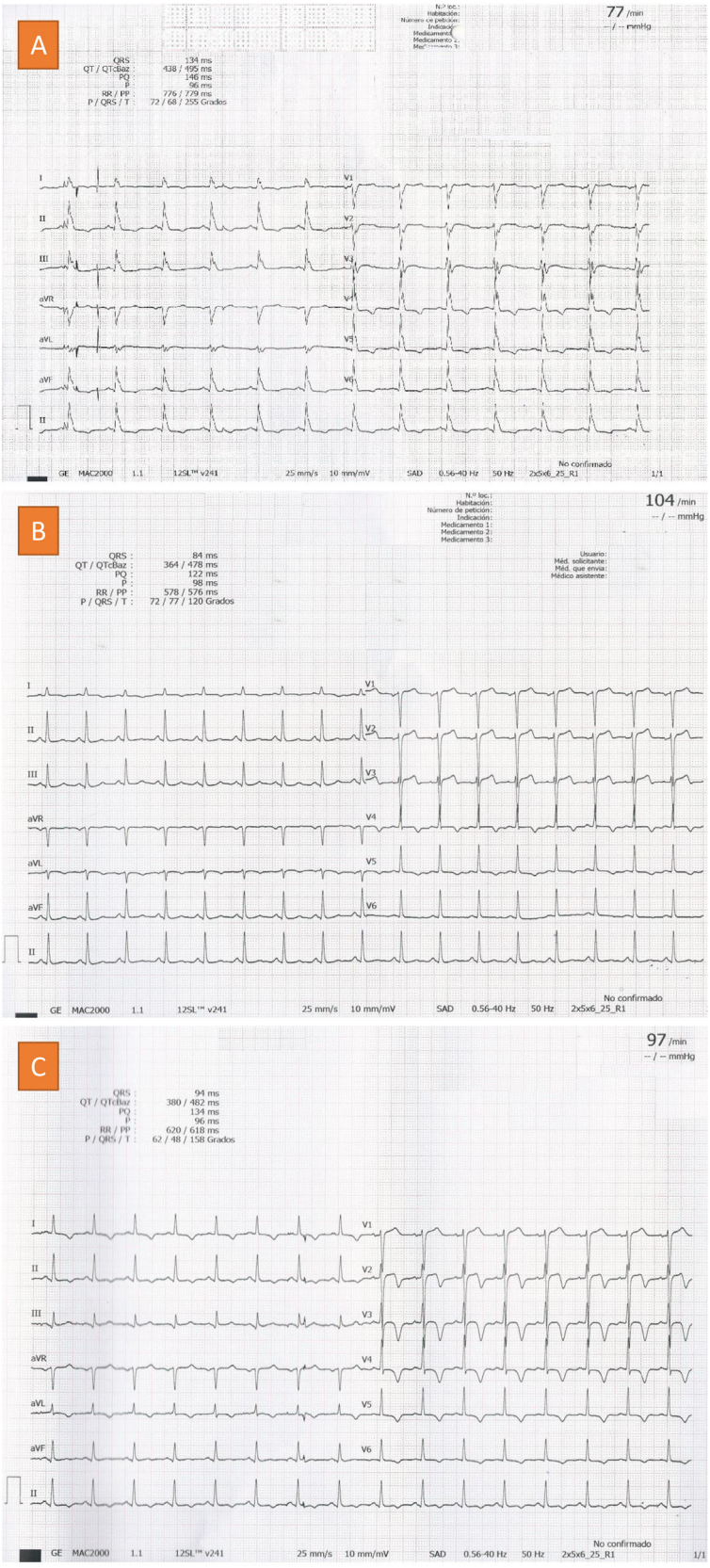
A
77 /min
-- / -- mmHg
QRS : 134 ms
QT / QTcBaz : 438 / 495 ms
PQ : 146 ms
P : 96 ms
RR / PP : 776 / 779 ms
P / QRS / T : 72 / 68 / 255 Grados
I
II
III
aVR
aVL
aVF
II
V1
V2
V3
V4
V5
V6
No confirmado
GE MAC2000 1.1 12SL™ v241 25 mm/s 10 mm/mV SAD 0.56-40 Hz 50 Hz 2x5x6_25_R1 1/1
B
104 /min
-- / -- mmHg
QRS : 84 ms
QT / QTcBaz : 364 / 478 ms
PQ : 122 ms
P : 98 ms
RR / PP : 578 / 576 ms
P / QRS / T : 72 / 77 / 120 Grados
No confirmado
GE MAC2000 1.1 12SL™ v241 25 mm/s 10 mm/mV SAD 0.56-40 Hz 50 Hz 2x5x6_25_R1
C
97 /min
-- / -- mmHg
QRS : 94 ms
QT / QTcBaz : 380 / 482 ms
PQ : 134 ms
P : 96 ms
RR / PP : 620 / 618 ms
P / QRS / T : 62 / 48 / 158 Grados
No confirmado
GE MAC2000 1.1 12SL™ v241 25 mm/s 10 mm/mV SAD 0.56-40 Hz 50 Hz 2x5x6_25_R1 1/1

Figure 1

Figure 2

The initial ECG tracing evidenced no known right bundle block (Fig. 1, image A) that reverted after the first 24 h, evolving towards subendocardial injury on the anterolateral surface and posterior ischemia in those territories (Fig. 1, images B and C). The brain CT scan evidenced symmetrical bilateral hypodensity in the globus pallidus (Fig. 2) – this image being characteristic of carbon monoxide poisoning due to the high iron content and high sensitivity to hypotension.

Appendix A. Supplementary data

Supplementary material to this article can be consulted in its electronic version, available at doi:https://doi.org/10.1016/j.medin.2022.01.009.