Retiform purpura, a rare chemoembolization adverse outcome

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Dear Editor,

Transcatheter arterial chemoembolization (TACE) is currently one of the standards of treatment for unresectable hepatocellular carcinoma.

It is a minimally invasive procedure whose adverse outcomes are well documented. Among those considered uncommon, we find skin outcomes.

We present a 73-year-old man with a history of chronic liver disease due to haemochromatosis. In 2020, during a screening ultrasound scan, a node was found in segment VIII. The patient was not a candidate for surgical resection and a multidisciplinary committee decided to perform arterial chemoembolisation. The follow-up MRI revealed tumour remnants and after evaluation by the committee it was agreed to perform a new TACE session of the hepatic lesions dependent on a peripheral branch of the gastroduodenal artery. During the procedure, doxorubicin spheres migrated through the internal mammary artery.
Two hours after the procedure, our patient referred pain in the right hypochondrium of moderate and gradually increasing intensity. The examination detected erythematous lesions that partially blanched under vitropressure, with a reticulated morphology, covering the right hypochondrium in the suprahepatic area. Due to the patient's intense pain, a blood test was performed, with no relevant alterations, and an abdominal CT scan was ordered, which showed changes caused by chemoembolisation and subcutaneous cellular tissue swelling, with no relevant complications.

The final diagnosis was retiform purpura due to necrosis due to occlusion of the microcirculation of the cutaneous and subcutaneous tissue caused by the migration of doxorubicin spheres or because of the existence of collateral vessels that were not detected in the arteriography.

Similar cases have been reported, suggesting that, to reduce the incidence, the best strategy is to keep the tip of the embolisation catheter as close as possible to the vessel that irrigates the tumour. Local measures can also be applied, such as the application of ice as a vasoconstrictor before the TACE was performed or, once the rash has showed, a local injection of steroids, although publications are limited. On the other hand, cases were reported, in which the application of topical corticosteroids has been associated with worsening of the lesions and the appearance of blistering lesions, and therefore they are not recommended.

The course of our patient was initially favourable after getting adequate analgesic control, but he required treatment by the Complex Wounds Unit of Plastic Surgery, with curettage of the necrotic lesions for proper healing of the lesions.

References:

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Fig. 1: Retiform purpura in the patient’s right hypochondrium.