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Lateralized Purplish Skin Discoloration Due to Aortic Dissection

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A 64-year-old woman presented with right limb weakness extending from her shoulder to her hand. Enhanced computed tomography revealed a Type A aortic dissection extending from the ascending aorta to the right common iliac artery, with the true lumen of the brachiocephalic artery compressed by the false lumen. In addition, the right superior epigastric artery was collapsed and the contrast effect was poor (**Figure A**). There was no ischemia in the other branches from the brachiocephalic artery. We decided to perform emergency surgery. A very faint right femoral artery pulse was detected after entering the operating room. Before surgery, the skin over the patient's right torso exhibited a dark purple discoloration (**Figure B**). The superior and inferior epigastric arteries usually supply the abdominal wall and intercommunicate.[1] Therefore, ischemia affecting one of these arteries will cause the other to become a collateral vessel, with no ischemia in the abdominal wall. In the present case, it could be considered that there was ischemia in both the right internal thoracic artery, which supplies the superior epigastric artery, and the right external iliac artery, which supplies the inferior epigastric artery. Accordingly, the discoloration was caused by this Type A acute aortic dissection. The discoloration resolved after surgery.

Generally, blood pressure measurement and sphygmopalpation are used to assess the extent of dissection, after image examination in the emergency room until the time of surgery, and there have been no previous reports of skin discoloration caused by ischemia in a case of aortic dissection. As shown by the present case, skin discoloration is occasionally clinically useful for assessment in aortic dissection.

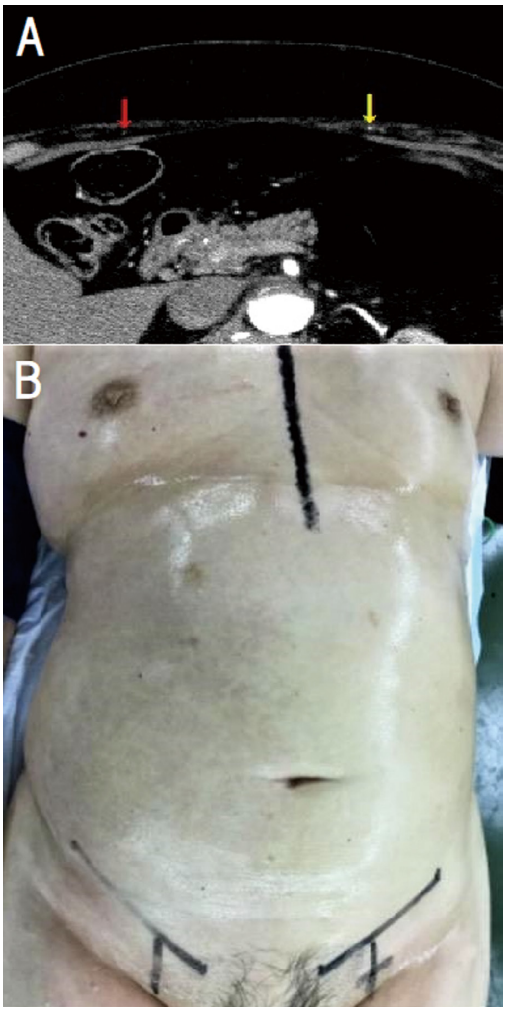

Figure. (**A**) Enhanced computed tomography showing a collapsed right superior epigastric artery (red arrow), with poor contrast effect. The left superior epigastric artery (yellow arrow) is normal. (**B**) Dark purple discoloration of the skin over the patient's right torso seen before the operation.

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Reference

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