Complete aortic arch transection after a blunt chest trauma

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We present a picture from the emergency digital subtraction angiography of a 16-year old male patient who experienced a blunt chest trauma as a result of a car accident (Fig. 1). The aortic arch was completely transected with the adventitia and the periaortic tissue providing tamponade and preventing extravasation. The picture shows the tourniquet-like hematoma in the aortic arch, the compromise of flow in the left-subclavian artery and an anomalous origin of the left common carotid artery from the innominate artery, a variation that lessens the value of the aortic arch concerning the brain perfusion. The patient was successfully operated on with a combination of median sternotomy and left anterior thoracotomy and had his aortic arch and part of his ascending aorta replaced with the aid of extracorporeal circulation. He tolerated the procedure very well. He awoke neurologically intact and was discharged from the hospital the 10th post-operative day.

Fig. 1. Digital subtraction aortography showing the haematoma of the aortic arch, the obstruction of the left subclavian artery and the anomalous origin of the left common carotid artery.

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