



## Obrazy v kardiologii | Images in cardiology

# A case of napkin ring calcification of aorta following traumatic transection

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### ARTICLE INFO

#### Article history:

Received: 13. 9. 2016

Accepted: 20. 12. 2016

Available online: 26. 1. 2017

#### Klíčová slova:

Aorta

Transsekce aorty

Výpočetní tomografie

#### Keywords:

Aorta

Aortic transection

Computed tomography

### SOUHRN

V tomto článku popisujeme dosud nepopsaný případ, a to pacientky, která přežila akutní aortální syndrom bez chirurgické intervence.

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### ABSTRACT

The case demonstrates a hitherto undescribed phenomenon of a case of survival following an acute aortic syndrome without surgical intervention.

A 78-year-old lady was originally referred for cardiac assessment of intermittent palpitations. She had a background of hypertension, hypercholesterolaemia and diabetes mellitus. Whilst in clinic she volunteered a previous history of a severe road traffic accident approximately fifty years earlier.

The accident had resulted in her being ejected through the car windscreen and sustaining several long bone and pelvic fractures. The story was widely reported in many national newspapers as the party had been popular society figures of the time.

There was no history of chest pain, though she remembered receiving several units of blood transfusion and being informed that she was gravely unwell. The patient

subsequently presented to outpatient department with a history of chest pain. Due to the history a CT aortogram was performed (Figs. 1 and 2).

Following multi-disciplinary review it was felt to represent previous traumatic aortic transection and spontaneous recovery.

Traumatic aortic transection is associated with high velocity road traffic accidents. The patient may not experience chest pain. Due to the nature of multiple severe injuries within such patients, a high index of clinical suspicion needs to be maintained to consider the diagnosis. Computed tomography has become the imaging modality of choice [1]. The condition is associated with high levels of mortality and morbidity even despi-

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**DOI:** 10.1016/j.crvasa.2016.12.006

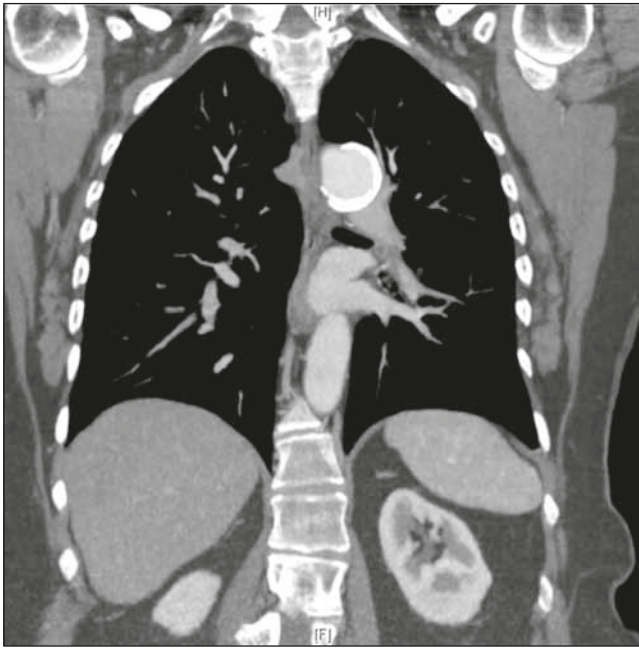


Fig. 1 – Coronal view of thoracic aorta with prominent calcification of aortic arch.

te corrective surgery [2]. This case represents a unique occurrence within the literature with a healed transection being incidentally diagnosed fifty years following the event and survival despite receiving no aortic intervention.

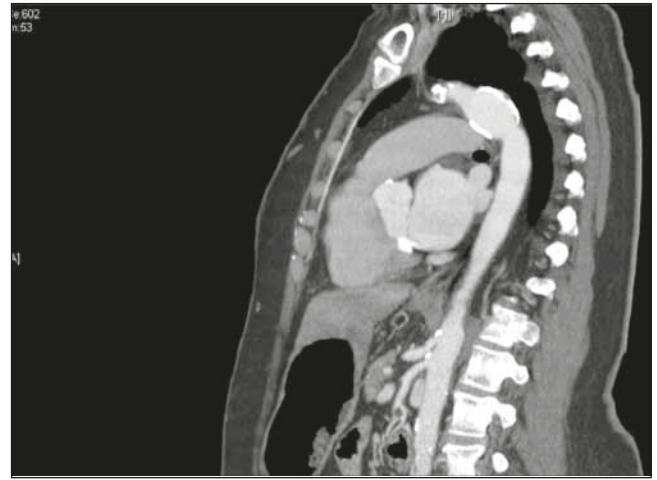


Fig. 2 – Sagittal view of aortic root and thoracic aorta. Significant aortic calcification noted distal to left subclavian origin.

## References

- [1] A. Khalil, T. Helmy, D.T. Porembka, Aortic pathology: aortic trauma, debris, dissection, and aneurysm, *Critical Care Medicine* 35 (2007) S392–S400.
- [2] P.A. Naughton, M.S. Park, M.D. Morasch, et al., Emergent repair of acute thoracic aortic catastrophes: a comparative analysis, *Archives of Surgery* 147 (2012) 243–249.