Abstract: The case of a 61-year-old male traffic accident victim with Tetralogy of Fallot (TOF) is reported. The autopsy revealed massive hemorrhages in the subcutaneous tissue, muscle, and subarachnoidal space. Furthermore, multiple fractures of ribs, sternum and thoracic vertebrae were observed. Histopathological examination revealed changes characteristic of trauma, such as acute lung congestion, acute renal cortical necrosis, and embolization in the lungs and kidney. These autopsy and histological observations indicated that traumatic shock was cause of his death. Moreover, histologically, we observed changes due to his congenital heart disease, such as right ventricular hypertrophy, heart failure cells in the lungs, sclerosis of the liver, and hyaline degeneration in the kidney. Furthermore, ischemic changes, shrinkage or loss of neurons, were seen in hippocampus, and swelling of astrocytes in both cortex and hippocampus were also observed. These observations lead us to speculate that a hypoxic episode may have caused his accidental death while driving. J. Med. Invest. 46: 115-119, 1999

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Figure a: Histological section showing the pulmonary artery and the right ventricle. The pulmonary valve is overriding the aortic valve, indicating a subvalvular VSD.

Figure b: Diagram of the heart with features of Tetralogy of Fallot. The VSD is located in the ventricular septum, allowing blood to shunt from the right ventricle to the left ventricle. The narrowed pulmonary outlet and hypertrophied RV wall are also highlighted.

Overriding AoV: Aortic valve overrides the ventricular septal defect, leading to a right-to-left shunt.

VSD: Ventricular septal defect.

narrowed pulmonary outlet: Narrowing of the pulmonary valve, causing increased pulmonary artery pressure.

hypertrophied RV wall: Hypertrophy of the right ventricular wall, compensating for the increased pulmonary blood flow.
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