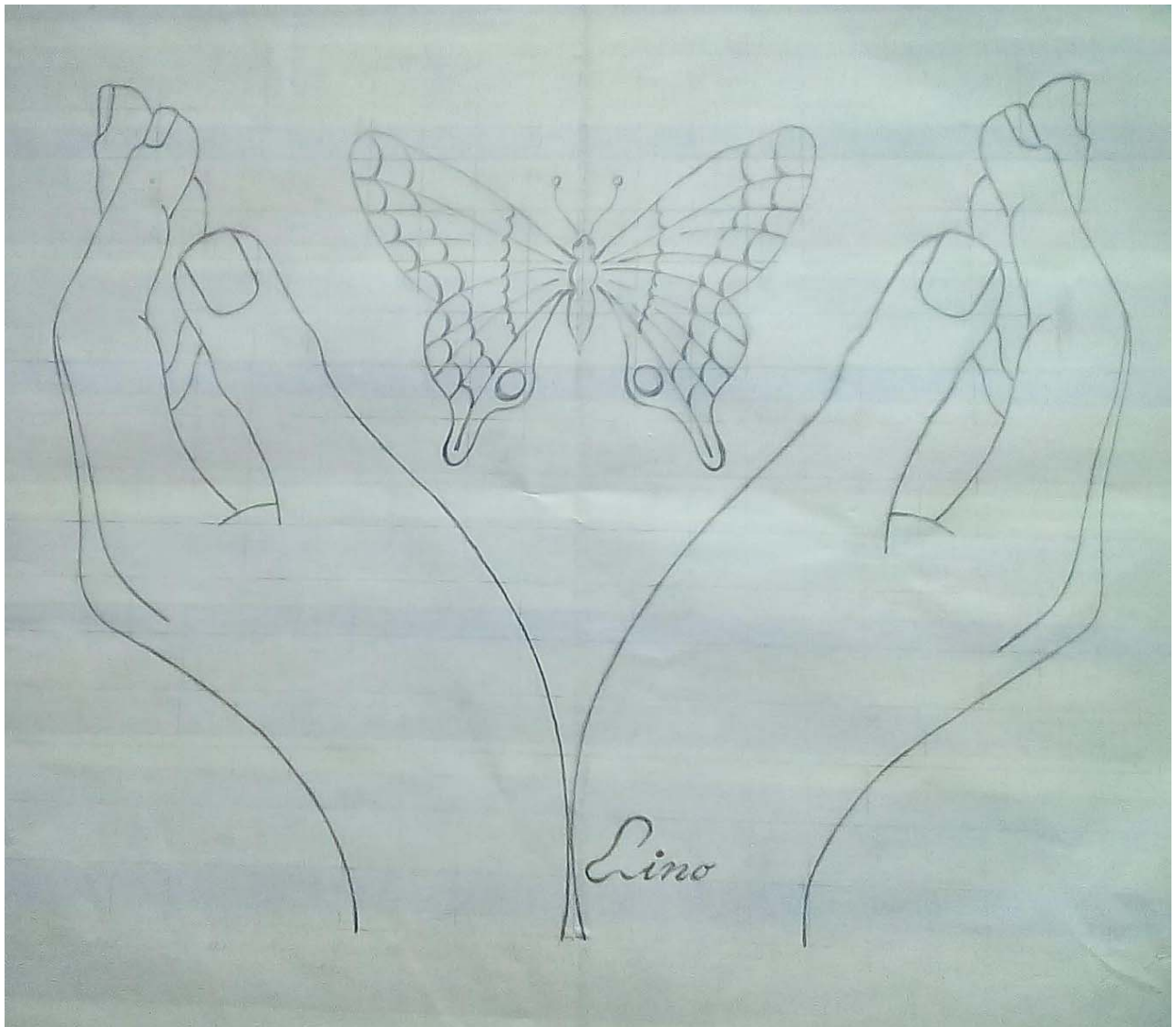


# INTERNATIONAL JOURNAL OF MEDICAL AND NURSING APPROACH (IJMNA)

Volume 3 (issue 1)

June 2022

MEDICAL AND NURSING



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## **Terson's syndrome: a rare case following a road accident.**

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**Keywords: Terson's Syndrome**

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### **ABSTRACT**

**Background:** Terson's Syndrome was first defined in 1900 by the French ophthalmologist Albert Terson. He reported for the first time that intracranial haemorrhage may be the cause of vitreous haemorrhage that secondarily involves the eye and which is a sign of the presence of subarachnoid haemorrhage. Terson's Syndrome is caused by increased intracranial pressure. This occurrence can take place for multiple reasons. Pathogenesis: Although the mechanism of onset is controversial, it is believed that the increase in intracranial pressure induces subarachnoid haemorrhage and leads to secondary involvement of the eye through the sudden increase in intracranial pressure which affects the blood vessels of the retina causing bleeding. **Aim:** The aim of the study is to emphasize the role of Case Report to improve the clinical management of patients that present a rare clinical condition like the Terson's Syndrome, which has a significant clinical relevance. **Case Report:** on July 26, 2021, we visited the patient S.J. who arrived by ambulance at the Fondi Hospital Emergency Room for a trauma due to a road hit. When he arrived at the emergency room, a total body CT was performed which documented: "bilateral subarachnoid haemorrhage in the hemispheric area". The patient was admitted to the Department of Medicine of the San Giovanni di Dio Hospital in Fondi. In the medicine unit, the patient appeared sleepy, but he responded to verbal stimuli and was able to follow simple orders. In the days following hospitalization, the patient was awake and partially cooperating but reported a reduction in bilateral vision. The first nursing assessment of the vital parameters exhibited a blood pressure of 150/85 mmHg, an oxygen saturation of 98% (in ambient air), a rhythmic heart rate at 74 beats per minute. On August 11, 2021, following the appearance of arterial hypertension refractory to medical therapy, the patient underwent denervation of the renal arteries; On August 13, 2021, the patient underwent a head CT scan that documented the evolution of brain lesions, and a chest CT scan that documented the presence of multiple filling defects attributable to pulmonary thromboembolism. A diabetic evaluation was also performed, following the finding of elevated blood glucose values confirmed in serial measurements, that allowed the diagnosis of type II diabetes mellitus. An ophthalmological evaluation was then performed, which showed an intravitreal hemorrhagic suffusion in the right eye and a complete hemovitreus with intravitreal haemorrhagic diffusion in the left eye, with an increase in the diameter of the optic nerves due

to the presence of blood in the subarachnoid spaces. He was then diagnosed with Terson's Syndrome.

**Discussion:** The peculiarity of the clinical case is linked to the initial negativity of the clinical picture due to cerebral haemorrhage linked to the gradual progression of intracranial hypertension due to the compression of the optic nerve and the appearance of the typical picture of Terson's Syndrome. The purpose of this work is to underline the importance of intra-hospital and outpatient follow-up in order to catch the signs and symptoms of any complications at the outset by making use of the specialist figures who support the routine Geriatric or Internist activity. **Conclusions:** A simple car accident, apparently without acute complications, has revealed the importance of a close multidisciplinary follow-up aimed at catching the incursion of a subtle complication such as intracranial hypertension responsible for Terson's Syndrome. Our hope is to bring forward this study as a warning to colleagues and recommend a close follow-up of all patients, whether hospitalized or staying home, within the first month of hospitalization.

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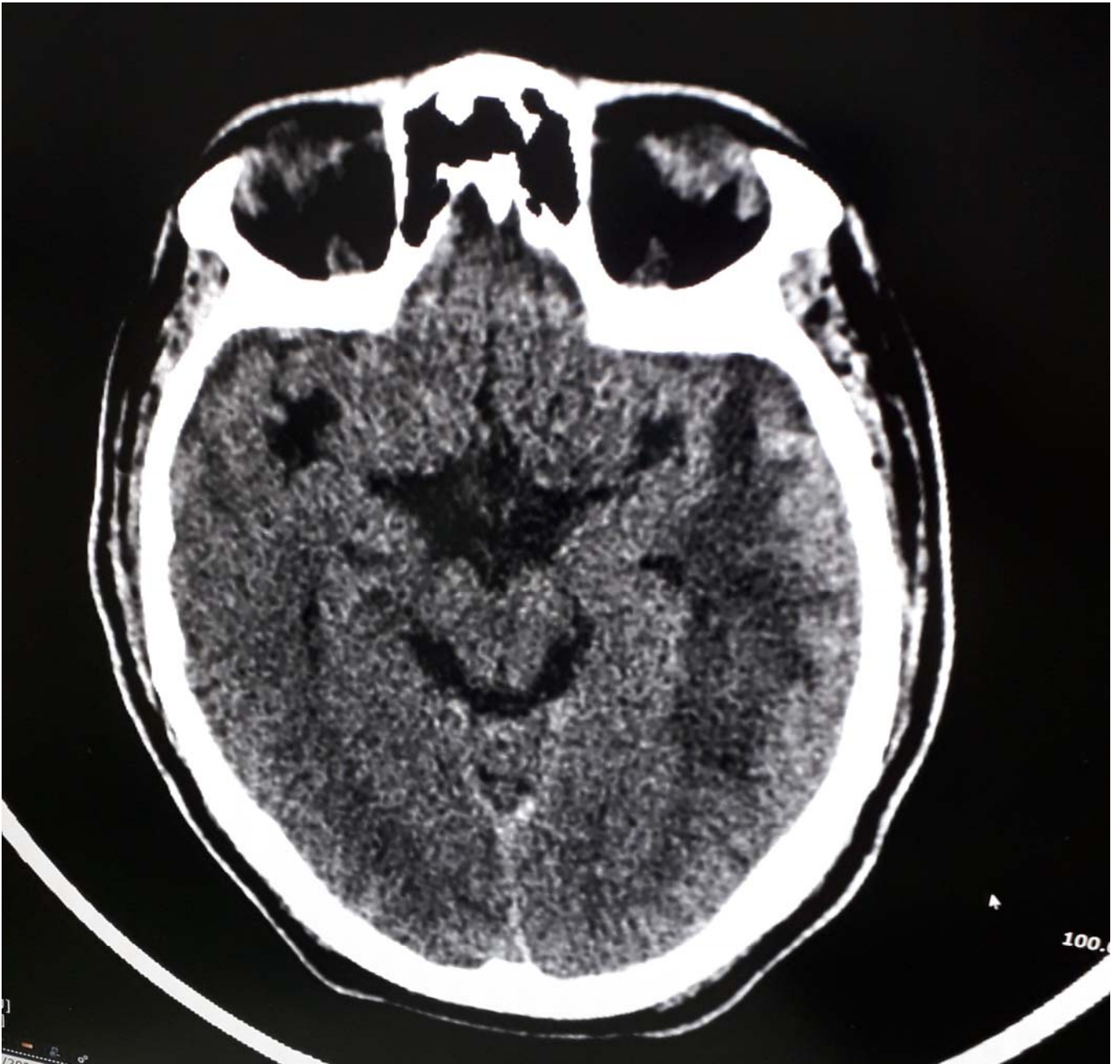
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**Conflict of Interest: none declared**

## FIGURES



**Fig. 1:** Detail of the intensity of the pulmonary embolism evidenced by CT scan.

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