

# Voluntary breath-holding leading to bilateral subconjunctival haemorrhaging in a patient with schizophrenia

Many forms of self-inflicted injury are seen in psychiatric patients. Some common forms reported in the literature include self-enucleation,<sup>1</sup> genital self-mutilation,<sup>2</sup> and amputation of a limb.<sup>3</sup> Different aetiologies may contribute to the different types of self-inflicted injury, one such being acting-out of psychotic symptoms. This is an important area to explore as acting-out of psychotic symptoms may lead to injuries, sometimes fatal, to the patient or to others.

## Case summary

A 24-year-old Chinese male was diagnosed with paranoid schizophrenia at the age of 21 years. His psychotic symptoms were resistant to a variety of pharmacological treatments. He harboured paranoid delusions, believing that others' trivial acts could cause great physical discomfort to him and that his drinks were poisoned.

He was attending a psychiatric day hospital regularly. Two weeks prior to the index in-patient admission, he became increasingly suspicious and believed that a member of the nursing staff's constant "humming of a tune" was directed at him and would cause "his heart to be ripped apart". He was initially managed with reassurance but after several days, the staff observed that he had visible haemorrhages in both eyes. He explained that in order to "mend his heart" which was "ripped apart" by the day hospital nursing staff member, he had to hold his breath and press his hands against his chest for as long as required. He was subsequently

admitted to an in-patient psychiatric unit for further management. A mental state examination performed on admission revealed a suspicious, unkempt young man with restricted affect and florid paranoid delusions. A physical examination showed bilateral subconjunctival haemorrhaging (Fig). His extra-ocular muscle movements were normal with no visual impairment.

## Discussion

The subconjunctival haemorrhaging was probably caused by an increase in intra-ocular pressure caused by the Valsalva manoeuvre.<sup>4</sup> Voluntary breath-holding usually has a natural breaking point when the powerful involuntary breathing mechanism overrides.<sup>5</sup> How this patient was able to hold his breath for long enough to achieve an intra-ocular pressure high enough to cause bilateral subconjunctival haemorrhaging remains a mystery. Careful assessment of a patient's mental state is paramount for preventing acting-out of psychotic symptoms that can lead to injuries.

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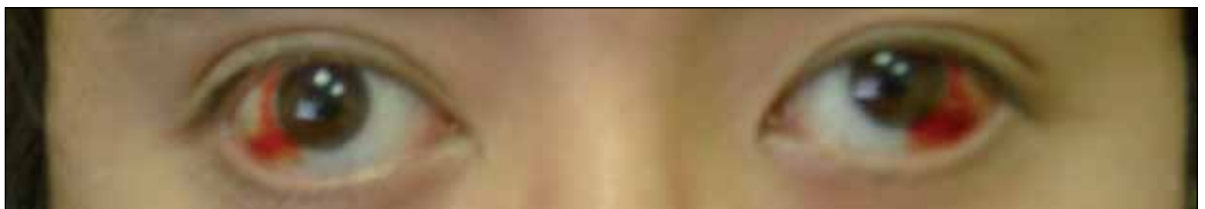


FIG. Bilateral subconjunctival haemorrhages

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