



## RESEARCH ARTICLE

### A DOUBLE ROSETTE CATARACT: ABOUT A CASE

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#### Abstract

Trauma to the eye may generate petaloid opacifications of the lens. Coup, contrecoup injury with axial expansion of the lens insulting lenticular fibers is responsible for this phenomenon. Evolution may be stationary or progressive and the management remains essentially surgical.

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#### Introduction:-

Ocular trauma may be responsible for several complications relate to the force induced expansion of the globe. Double rosette cataract is a rare finding due to this type of trauma. Herein, we report a rare case of double rosette cataract following a blunt trauma managed surgically.

#### Clinical case:

A 33-year-old man presented with progressive decrease of vision in his right eye over a 14 months period following a blunt trauma while playing basketball. His best corrected visual acuity was 20/100 OD and 20/20 OS. The biomicroscopic examination revealed central grayish lenticular opacity with classical petaloid appearance described as rosette-shaped cataract (Figure 1). The petals were located at the level of anterior cortex and were separated from each other with darkish central lines. Each petal was centered by a smaller petaloid faint gray pattern. Underneath this opacification, we noted a second dull and incomplete rosette. There was no additional ocular abnormality associated with this lesion at slit lamp and ocular ultrasound examination. Computed tomography scan ruled out the presence of an intraocular foreign body. The fellow eye was unremarkable. The patient underwent cataract surgery with good outcome.

#### Discussion:-

Petaloid/ rosette-shaped opacifications are typically seen after an inflicted trauma to the eye [1-2]. It seems that the blunt trauma generates forces causing coup, contrecoup injury with axial expansion of the lens insulting lenticular fibers [3]. This pattern was also but rarely described after electric shock, exposure to infrared energy or ionising radiation [4]. The subsequent cataract may be stable or progressive and may appear several months after the initial insult. Clinical evaluation is of paramount importance to ensure other ocular comorbidities related to the trauma. This type of cataract is classically described among young adults and appears to be soft cataract during phacoemulsification [5].

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**Conclusion:-**

Ocular trauma may cause double rosette cataract. It is a typical pattern related to this condition. The exact underlying mechanism remains unclear. The management is surgical with good prognosis in absence of associated lesions.



**Figure 1:-** Slit-lamp photography with diffuse illumination showing a double rosette cataract.

**Disclosure of interest:**

The authors declare that they have no conflict of interest.

**References:-**

- [1] Singh RB, Thakur S, Ichhpujani P. Traumatic rosette cataract. *BMJ Case Rep* 2018;11:e227465.
- [2] Ram J, Gupta R. Petaloid cataract. *N Engl J Med* 2016;374:e22.
- [3] Zehetner C, Bechrakis N. Stellate cataract. *N Engl J Med* 2013;368:e18.
- [4] Venkateswaran N, Galor A. Rosette-shaped cataract due to lightning injury. *JAMA Ophthalmol* 2018;136:e175719.
- [5] Sethi A, Ramasubramanian S. Double rosette cataract: a striking image! *Indian J Ophthalmol* 2019;67:124—5.