

# Raccoon eyes during general anaesthesia for joint replacement

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## Abstract

### INTRODUCTION

Raccoon eyes are described as bilateral peri orbital accumulation of blood producing “Panda bear-like appearance”. It is often seen with basilar fractures of the skull.

Periorbital purpura due to skin infiltration is seen in primary amyloidosis either as a spontaneous event, or after prolonged eye-strain. It is not reported following general anaesthesia for Total joint replacement surgery .

### CASE REPORT

A 76 years old lady with history of well controlled hypertension underwent elective right Total Knee Replacement( PFC, Johnson and Johnson, NJ). Anaesthetic induction was initiated with propofol and tracheal intubation was facilitated with succinylcholine. Before tracheal intubation, her eyes were gently closed and taped with latex-free transparent tape. Anesthesia was maintained with isoflurane. Her surgery lasted 80 minutes and intraoperative anaesthesia was uneventful.

24 hours after surgery she developed B/L asymmetrical periorbital ecchymosis Surgical wound remained dry and patient was asymptomatic.

Underlying coagulopathy was considered, but subsequent coagulation studies were within normal limits: platelet count was  $214 \times 10^9/L$ , PT was 12.1 s, INR was 1.1, and aPTT was 35 s. The periorbital ecchymosis slowly faded over the next few days and the patient had an uneventful recovery.

Figure 1

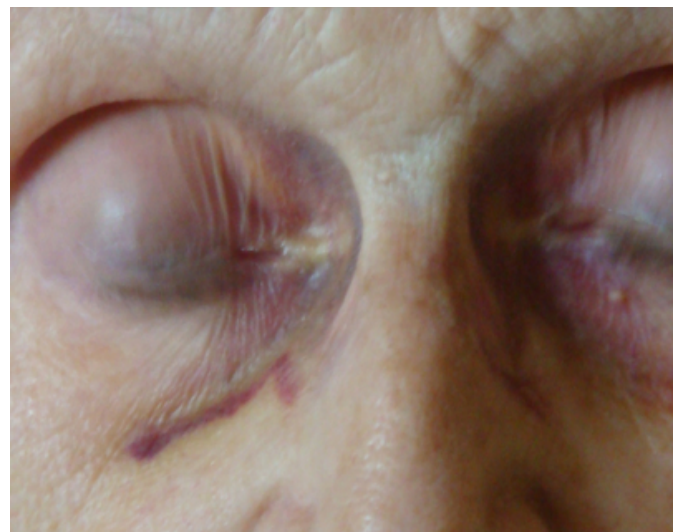
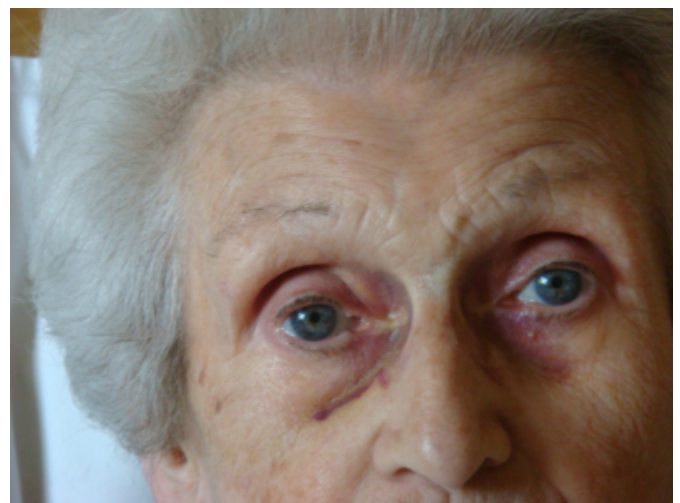


Figure 2



4 days postoperative.

## **DISCUSSION**

“Raccoon eyes” or bilateral periorbital ecchymoses can result from direct trauma to the eye and surrounding soft tissues,1 basal skull fracture,2 rhinoplasty,3 amyloidosis, 4,5 malignancy,6-8 trigeminal autonomic cephalgia,9 and vigorous sneezing10 , coughing11 and vomiting. This patient’s periorbital ecchymoses was most likely caused by the protective eye tape during anaesthesia. This was probably related to increased capillary fragility in an elderly patient with history of easy bruisability.

To our knowledge there is no reported case of raccoon eyes during general anaesthesia for joint replacement. Care needs to be exercised while putting and peeling of tap tape on the eyes especially in elderly population.

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