CASE REPORT – OLGU SUNUMU

## POSTOPERATIVE BILATERAL VISUAL LOSS DUE TO BILATERAL OCCIPITAL LOBE INFARCTION

# OKSİPİTAL LOB İNFARKTINA BAĞLI POSTOPERATİF BİLATERAL GÖRME KAYBI

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#### SUMMARY

Postoperative visual loss (POVL) is a very rare, unexpected and devastating complication. It can occur during all kind of ocular or non-ocular surgeries. In this report we present a case of POVL due to bilateral occipital lobe infarction caused by basilar artery thrombosis after surgery for gynaecologic malignancy.

KEY WORDS: Postoperative complication, Visual loss, Cerebral infarct

#### ÖZET

Postoperatif görme kaybı çok nadir görülen, beklenmedik ve korkulan bir komplikasyondur. Oküler ya da oküler olmayan tüm cerrahiler sonrasında görülebilir. Bu olgu sunumunda jinekolojik malignite cerrahisi sırasında oluşan baziler arter trombozuna sekonder gelişen oksipital lob infarktına bağlı bilateral görme kaybını bildirmekteyiz.

ANAHTAR KELİMELER: Postoperatif komplikasyon, Görme kaybı, Serebral infarkt

### INTRODUCTION

Visual loss after anaesthesia and surgery (postoperative visual loss, POVL) is a rare, unexpected and devastating complication, and can follow ocular or non-ocular surgery. The highest rates of visual loss are with cardiac and spine surgery (1-4). We present a case of POVL due to bilateral occipital lobe infarction caused by basilar artery thrombosis after surgery for gynaecologic malignancy.

#### **CASE REPORT**

A 72-year-old, ASA physical status class II (with well controlled hypertension) woman underwent total abdominal hysterectomy and bilateral salphingo-opherectomy with pelvic lymphadenectomy and appendectomy. Procedure was carried out in supine position and no facial or ocular trauma occurred during the operation. Anaesthesia induction and maintenance were accomplished with thiopental, fentanyl, vecuronium and desflurane-N<sub>2</sub>O combination. During the course of anaesthesia, all monitored parameters were within acceptable limits (ECG: Normal sinus rhythm and heart rate 67-116 beats min<sup>-1</sup>; non-invasive mean blood pressure: between 70-95 mmHg; oesophageal temperature: >36.2 °C; end-tidal CO<sub>2</sub>: 33-38 mmHg; arterial oxygen saturation: >95%). During the 90 minute procedure approximately 200 mL blood was lost and 2000 mL of crystalloid was administered. At the end of the procedure, patient was extubated without any complication and transferred to the general ward. Meperidine and NSAID's were used for postoperative pain relief. Six hours after the operation, when she was awake and alert, she complained about partial and blurred vision in her left eye with no other neurological findings. Ophthalmologic examination revealed no ocular abnormalities that might explain her complaints. Following day, her complaints involved both eyes. Full neurological examination was repeated with no pathological findings. Magnetic reso-

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nance imaging (MRI) of the brain revealed bilateral occipital infarct and basilar artery thrombus formation (Figure 2-3). Low molecular weight heparin and acetylsalicylic acid therapy were begun for anticoagulation. Fifth day following the operation, oral warfarin therapy was started. A slow but progressive improvement in the patient's vision was noted and she was discharged home at 15th day of the operation. Three months after the operation, patient's low visual acuity with visual field defects persisted with slow improvement.

### DISCUSSION

The main causes of POVL after non-ocular surgery are ischaemic optic neuropathies, retinal vascular occlusion, pituitary apoplexy and cortical blindness (1-7). In the case presented here, since fundoscopic examination was normal, initially posterior ischaemic optic neuropathy was considered as a possible cause. But in cases with no suspected risk factors related to patient position and/or surgery, possibility of the other and less common causes should not be ignored. As a matter of fact, MRI and MRI-angiography made with this in mind, revealed bilateral occipital infarct and basilar artery thrombus formation.

We conclude that, POVL is a multifactorial induced situation and when faced with POVL, less common causes such as, cortical infarction should be kept in mind beside the more common causes, and hope to increase the awareness among anaesthesiologists even when there are no obvious risk factors present. In addition, in cases prone to thrombosis like elderly patients with gynecologic malignancies in the perioperative period, early administration of anticoagulant agents including low molecular weight heparin prophylaxis should be considered.

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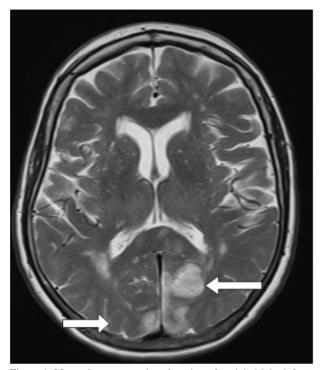


Figure 1. Magnetic resonance imaging view of occipital lobe infarct (Arrows)

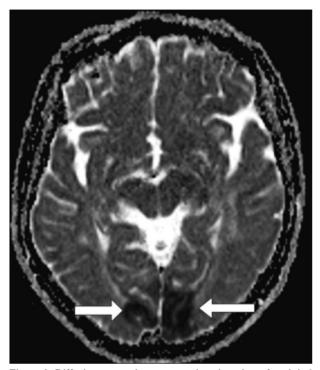


Figure 2. Diffusion magnetic resonance imaging view of occipital lobe infarct (Arrows)