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## Living with an artificial eye—the emotional and psychosocial impact

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### Introduction

The eye forms an integral part of our identity. However, they maybe removed due to specific indication: ocular tumours, irreparably damaged and painful globes or severe ocular infections. The loss of an eye can cause more anguish than simply the loss of vision, it can also affect our confidence, mental health and our quality of life [1].

Evidence indicates that patients living with anophthalmia have lower health-related quality of life scores. Patients own perceptions of their social relationships are negatively affected and they have been shown to suffer from anxiety and depression [2].

We evaluated the emotional and psychosocial well being of patients that had undergone either enucleation or

evisceration to identify whether further emotional support or counselling would be beneficial.

### Method

All patients over the age of 18 that had undergone either an evisceration or enucleation performed at the Princess Alexandra Eye Pavilion, Edinburgh between 1 January 2011 and 1 January 2018 were identified. Theatre online coding systems allowed us to identify the selected cohort. A telephone questionnaire (Fig. 1) was then conducted.

### Results

Fifty two patients had undergone either enucleation or evisceration. Thirty nine patients were still living. We attempted to contact all 39 patients and received 25 responses (64%).

Pain was identified as the overwhelming reason that patients underwent the operation (68%) with more than half of our participants stating that preoperative pain was severe and interfering with daily activities. About 40% of patients indicated a loss of confidence as a result of the surgery, and a lack of emotional support was cited in 44% of patients (Fig. 2). One to one counselling sessions were stated as the most desired form of support both pre and postoperatively.

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**Fig. 1** Evisceration/enucleation telephone interview sheet

### Evisceration/Enucleation Questionnaire

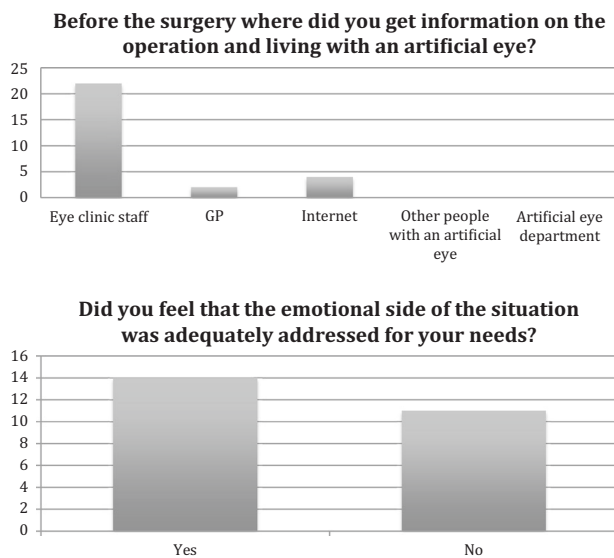
1. What was the main reason for your decision to go ahead with the operation?
  - a. Pain
  - b. Appearance
  - c. Complicated eye care (clinic visits, hospital admissions)
  - d. Persuaded by other people
2. Did you suffer pain from the eye before the operation?
  - a. Not at all
  - b. Mild
  - c. Severe, interfering with daily activities
3. Did you suffer loss of confidence following the operation?
  - a. Not at all
  - b. Mild
  - c. Severe
4. How do you feel having had the surgery?
  - a. Wish I hadn't had the operation
  - b. Some regrets
  - c. No different
  - d. Pleased with the outcome
  - e. Wish I had it sooner
5. Before the surgery where did you get information on the operation and living with an artificial eye?
  - a. Eye clinic staff
  - b. GP
  - c. Internet
  - d. Others with an artificial eye
  - e. Artificial eye department
6. Did you receive enough information before the surgery?
  - a. Yes
  - b. No (If no what additional information would have been helpful)
7. Did you feel that the emotional side of the situation was adequately addressed for your needs?
  - a. Yes
  - b. No
8. If any, what additional support would have utilized
  - a. One to one sessions with a counselor
  - b. Informal chat with an artificial eye user
  - c. Contact group with others that had been through the same
9. Is there anything you wished you had known preoperatively?

## Discussion

Pain is the predominant cause for most patients undergoing eye removal. Between 30% and 50% of patients suffering from chronic pain also struggle with depression and anxiety [3], therefore preoperatively we are already dealing with a cohort of people who are more likely to suffer from mental health illness.

Our study indicated that patients wanted to know more about the operation: the outcome, cosmesis and how the prosthesis will look and fit. As nearly half of patients requested more emotional support both pre and post-operatively it seems they were not adequately prepared for what was to come.

Anophthalmic patients have poorer health-related quality of life, poorer self-rated health and more perceived stress than the general population. In particular quality of life was



**Fig. 2** Graphs showing confidence loss post surgery and adequately addressed emotional needs

limited by emotional problems and mental health disorders [4]. As mental illness remains the leading cause of years lived with disability worldwide [5] and the socioeconomic impact of depression on the UK alone has been estimated annually at over £7 billion [6], it is vital that we consider the emotional and psychosocial needs of our patients.

## Conclusion

Loss of an eye and the use of artificial eyes have wide ranging emotional and psychosocial impact on patients. Care should

not stop when the patient leaves the operating theatre. To maximise postoperative quality of life, a holistic approach, involving counsellors and psychotherapy is essential.

## Compliance with ethical standards

**Conflict of interest** The authors declare that they have no conflict of interest.

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## Raised intra-ocular pressure in the setting of Coffin-Siris syndrome

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Coffin-Siris syndrome (CSS) is a rare heterogenous genetic disorder first described in 1970. The diagnosis is considered in children with cognitive/developmental delay, 5th finger hypoplasia and characteristic facial features. There is, however, significant variability in the phenotypic appearance, making clinical diagnosis challenging [1, 2].