

LETTER**Uncovering the etiology of ptosis prior to blepharoplasty**

Josef Finsterer

*Krankenanstalt Rudolfstiftung, Messerli Institute, Vienna, Austria***Correspondence:** Josef FinstererKrankenanstalt Rudolfstiftung, Messerli Institute, Postfach 20, 1180 Vienna, Austria
Tel: +43-1-71165-72085, Fax: +43-1-71165, E-mail: ffigs1@yahoo.deReceived: March 14, 2020 • Revised: April 17, 2020 • Accepted: April 17, 2020
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Dear Editor,

We read with interest the article by Weitgasser et al. [1] about ptosis correction in a 52-year-old man with Kearns-Sayre syndrome (KSS) and bilateral ptosis that started 20 years earlier. The authors concluded that “awareness of myopathic symptoms is necessary to prevent overlooking serious yet improvable conditions” [1]. However, the report has a number of shortcomings.

In the abstract, the authors state in one sentence that bilateral ptosis was “progressive,” but in the next sentence, ptosis is described as “recurrent.” To avoid any contradiction, it should be clearly stated whether the course was undulating, but progressive overall, or whether the patient’s ptosis truly entirely disappeared and recurred. In the latter case, the authors must explain what they meant by “progressive.”

A further shortcoming of the report is that KSS was diagnosed without genetic confirmation. In most cases, KSS is due to sporadic, single mitochondrial DNA (mtDNA) deletions [2]. However, in 4% of cases, the single mtDNA deletion is maternally transmitted [2]; for this reason, it is crucial to conduct clinical and genetic investigations of the mother of KSS patients. Since KSS may also occur due to mtDNA point mutations in rare cases [3], a negative result for mtDNA deletion screening does not exclude a genetic cause.

Interestingly, figure 1 shows bilateral ptosis with right-sided predominance despite ptosis correction on the right side 12 years prior [1]. It would be helpful to know the preoperative status of the eyelid and the surgical method applied for the first ptosis correction. The authors should explain why ptosis was more severe on the right side than on the left side, despite previous right-sided surgery.

A further shortcoming is that the patient was not prospectively investigated for multisystem involvement. It is only reported that the index patient was of short stature, had retinitis pigmentosa, hypoacusis, and myopathy [1]. However, KSS patients may also present with endocrine abnormalities (e.g., diabetes or hypogonadism), renal fail-

ure, or cardiac disease [4]. Concerning cardiac involvement, the most frequently reported condition is third-degree atrioventricular block, which requires implantation of a pacemaker. However, patients with hypertrophic/dilated cardiomyopathy [5] and ventricular arrhythmias have also been reported.

Furthermore, no information was provided on the medications that the patient was regularly taking. Since he was already 52 years old, it is possible that he was taking a number of drugs, which may have a major effect not only on the outcome of surgery, but also on the disease in general. Information is also missing on whether the patient presented with ophthalmoparesis with or without double vision.

A further shortcoming is that information on the type of anesthesia applied for blepharoplasty was not provided. Even in patients receiving local anesthesia, severe side effects may develop. Thus, the authors should indicate whether local or general anesthesia was applied and whether the patient experienced any side effects from the anesthetic.

Overall, this interesting case has a number of shortcomings and limitations. To assess the overall course and prognosis, it is crucial to establish the genetic cause, to provide the family history, to prospectively investigate the possibility of multisystem involvement, and to report the current medications taken. The main message of this case should be that a patient with unilateral or bilateral ptosis must be seen by a neurologist prior to blepharoplasty. Since some causes of ptosis, such as myasthenia, may respond to treatment, and since the diagnosis has a strong impact on whether surgery is indicated, it is crucial to establish the neurological diagnosis prior to surgery.

Notes**Conflict of interest**

No potential conflict of interest relevant to this article was reported.

ORCIDJosef Finsterer <https://orcid.org/0000-0003-2839-7305>**References**

1. Weitgasser L, Wechselberger G, Ensaf F, et al. Treatment of eyelid ptosis due to Kearns-Sayre syndrome using frontalis suspension. *Arch Plast Surg* 2015;42:214-7.
2. Poulton J, Finsterer J, Yu-Wai-Man P. Genetic counselling for maternally inherited mitochondrial disorders. *Mol Diagn Ther* 2017;21:419-29.
3. Zhang Y, Wang ZX, Niu SL, et al. Phenotype heterogeneity associated with mitochondrial DNA A3243G mutation. *Zhongguo Yi Xue Ke Xue Yuan Xue Bao* 2005;27:77-80.
4. Finsterer J, Zarrouk-Mahjoub S. Kearns-Sayre syndrome is genetically and phenotypically heterogeneous. *Pediatr Med Chir* 2018;40:193.
5. Sehgal S, Choudhry S, Debelenko L, et al. Dilated cardiomyopathy with cardiogenic shock in a child with Kearns-Sayre syndrome. *BMJ Case Rep* 2016;2016:bcr2015213813.