

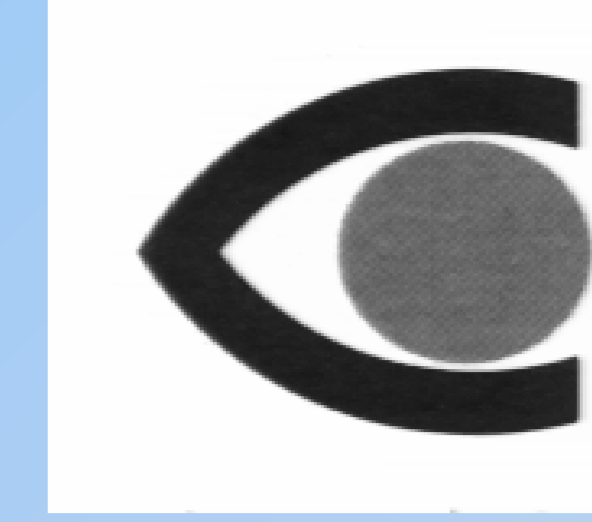
Failure to use quantitative measurement methods hampers clinical studies in posterior uveitis such as posterior sarcoidosis: dual fluorescein/indocyanine green angiography versus SUN vitritis evaluation.

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Background:

- Assess the respective scores of SUN (standard uveitis nomenclature) vitritis scaling system versus dual fluorescein (FA)/ indocyanine green angiography (ICGA) scoring in posterior sarcoidosis (PS) and their potential use for clinical studies.

Patients & Methods:

- Retrospective study on PS patients seen in the Centre for Ophthalmic Specialized Care, Lausanne, Switzerland. Angiography signs were quantified according to an established FA and ICGA scoring system for uveitis. Evaluation of vitritis was performed using the SUN scaling system for vitritis.

Results:

- 23 patients (4 men) fulfilling the diagnostic criteria were included in the study. The choroid was predominantly involved in 19 patients (82.6%) (40/46 eyes [87%]) and the retina in 2 (8.7.4%) (6/46 eyes [13%]) and the mean angiographic score was 14.2 ± 5.1 (choroid) versus 7.3 ± 4.6 (retina) ($p < 0.0001$).
- 5 of 46 eyes showed a SUN vitritis score ≥ 2 necessary for inclusion in a clinical trial.

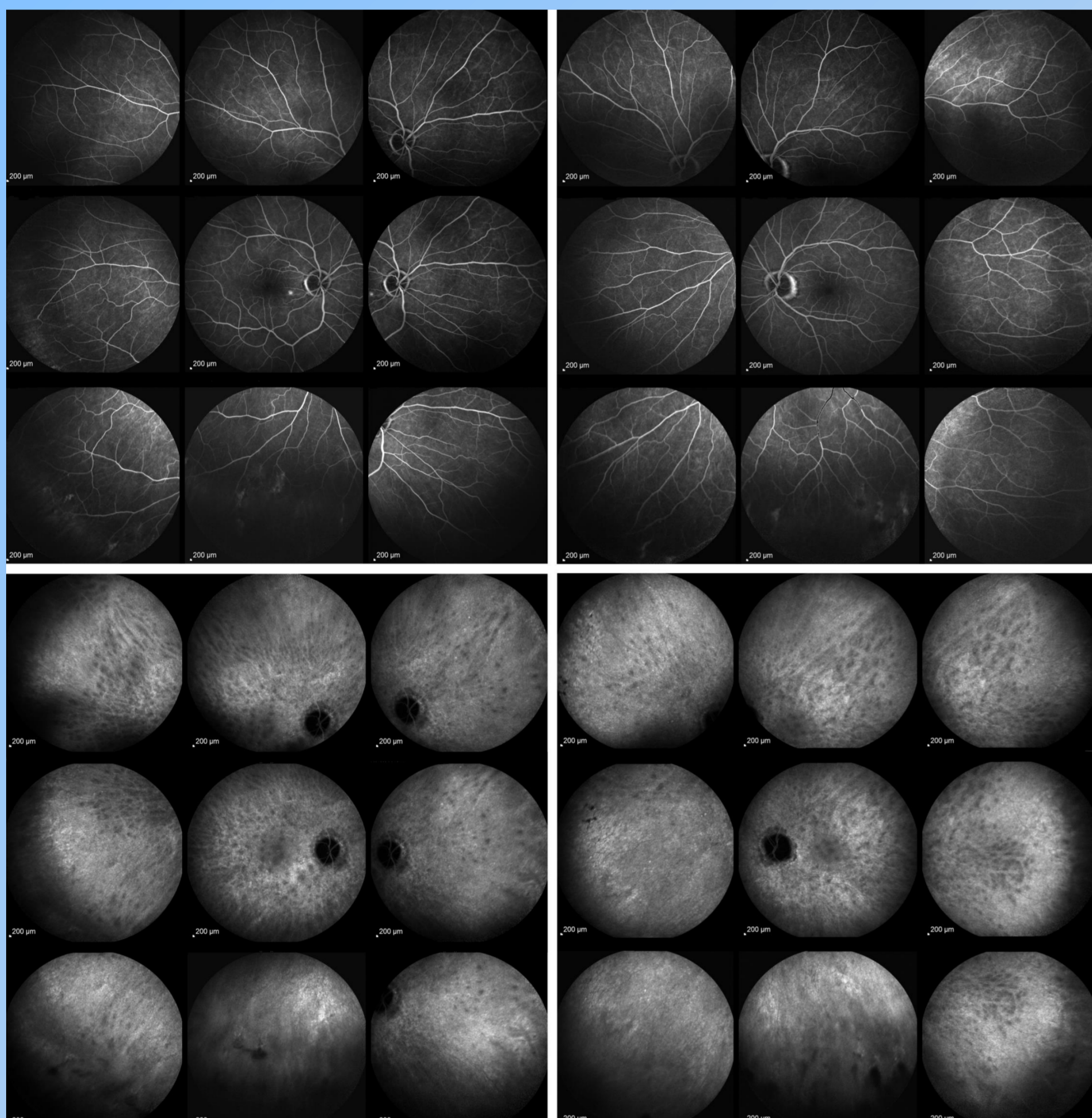


Figure 1. FA panorama frames showing macroaneurism of the right eye (top left) in ocular sarcoidosis and normal in the left eye (top right). The FA score was 1/40 in the right eye and 0/40 in the left eye.

ICGA late phase showing in both eyes (bottom left & right) numerous hypofluorescent dark dots, indicating occult granulomas not seen in the fundus picture nor on FA. The ICG angiographic score was 20/40 in both eyes.

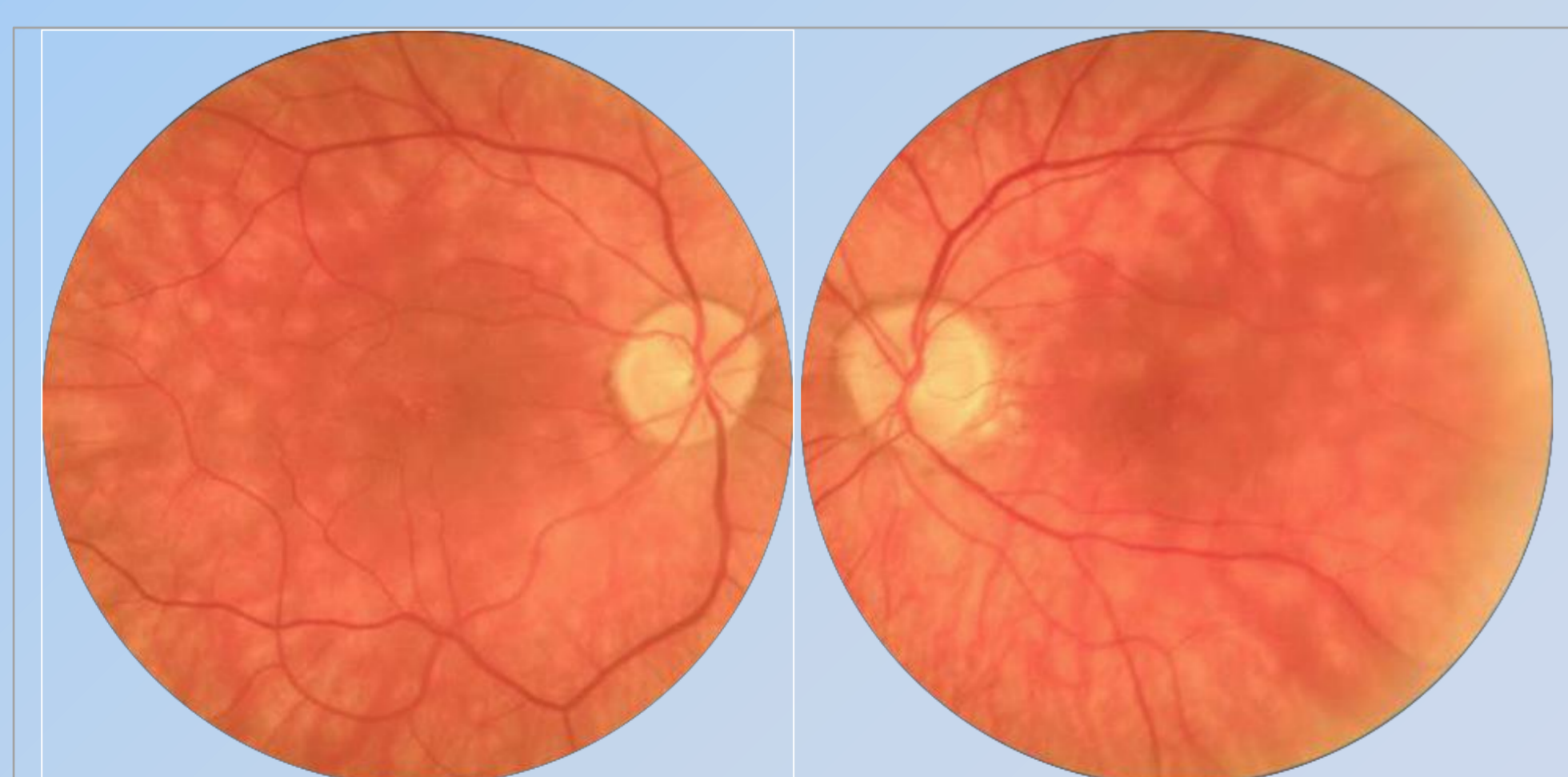


Figure 2. Retinophotography of the same patient showing a SUN vitritis score = 0 in both eyes versus very high ICGA score (see figure 1).

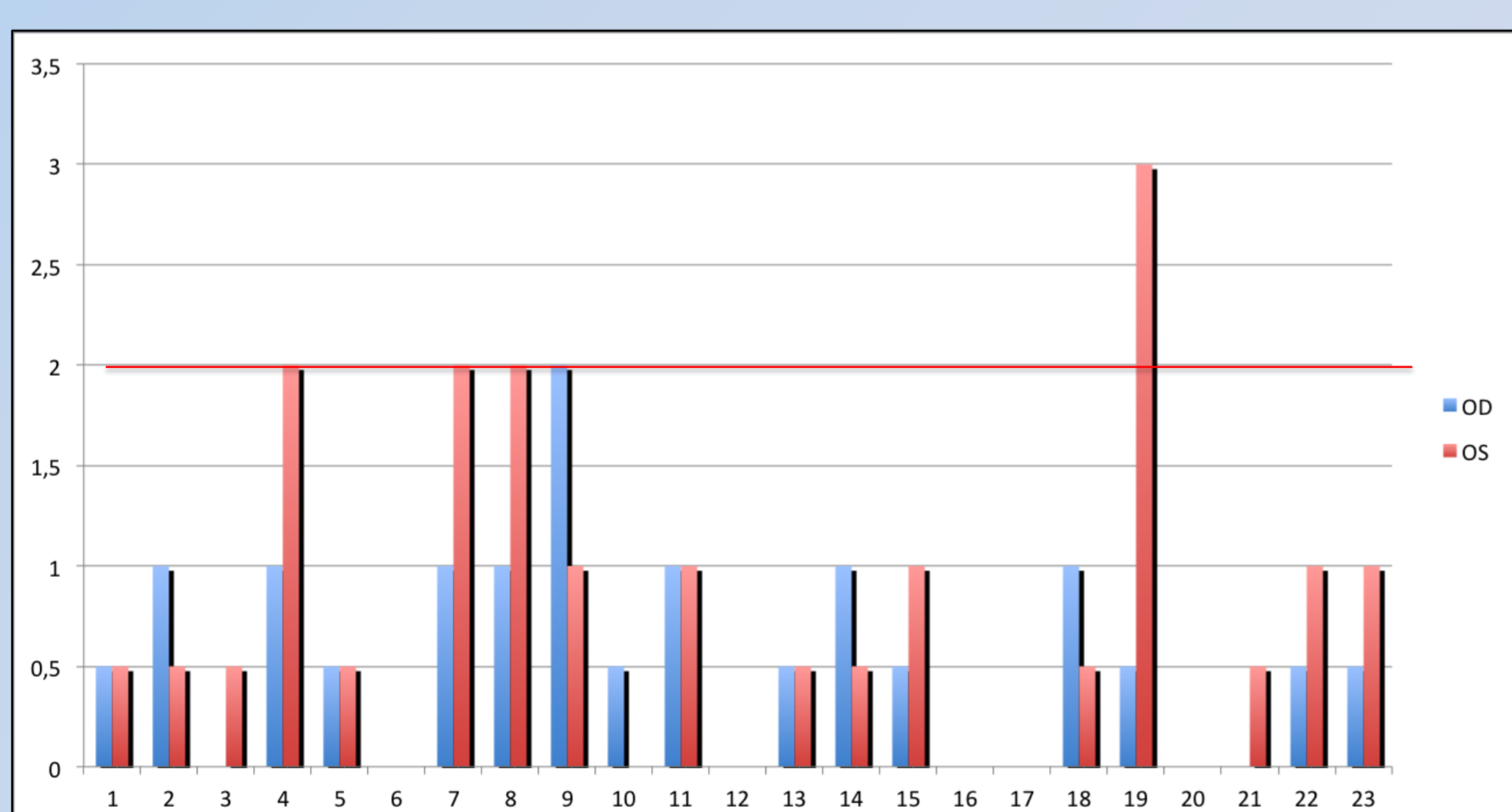


Figure 3. Bar graph showing vitreous haze for each patient using standardization of uveitis nomenclature scale (SUN). Only 5/46 eyes could have been included in clinical trial if SUN criteria would have been followed (score ≥ 2).

Conclusions:

- For the first time the precise measurement of global posterior inflammation was achieved by a dual FA/ICGA scoring system in PS.
- It should represent one of the outcomes for posterior uveitis (PU) in clinical trials in future.
- In contrast, SUN vitreous haze scale, the qualitative/subjective criterion presently used in studies on PU, appears as utterly inadequate, as in PS, a major entity of PU, only a tiny percentage of eyes could have been included in a clinical trial.
- To evaluate correctly intraocular inflammation in PS and probably other PU entities, the use of dual FA & ICG angiography is strongly recommended.