

<sup>2</sup>Department of Ophthalmology, Buddhist Taipei Tzu Chi General Hospital, 289 Jian-Guo Road, Xindian, Taipei 231, Taiwan

Correspondence: C-M Yang,  
Tel: + 886 2 2312 3456 ext 5187;  
Fax: + 886 2 2341 2875.  
E-mail: chungmay@ha.mc.ntu.edu.tw

*Eye* (2006) 20, 1379–1382. doi:10.1038/sj.eye.6702218;  
published online 6 January 2006

Sir,  
**Bilateral stellar neuroretinitis in a patient with dengue fever**

Dengue fever is a disease caused by an arbovirus transmitted by the *Aedes aegypti* and *Aedes albopictus* mosquito, endemic to Southeast Asia and Southeast Africa,<sup>1</sup> as well as Brazil, all of which are tropical regions.

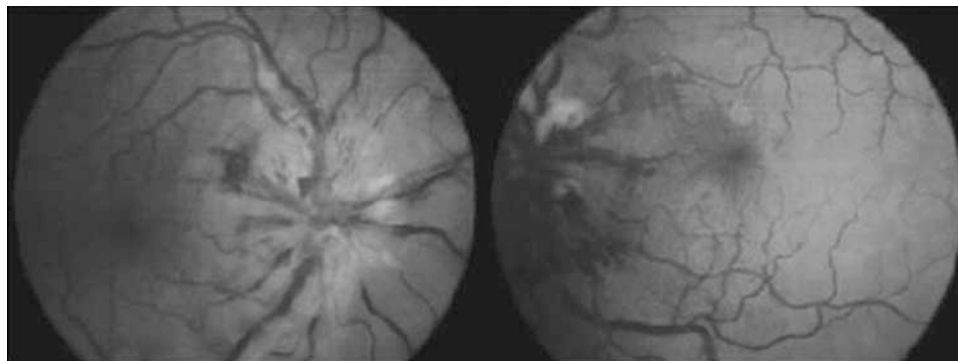
Dengue fever, especially the classic variety, rarely affects the eye, but when it does, the consequences may be severe. In 1929, Anargyros<sup>2</sup> described bilateral retrobulbar neuritis in a patient with dengue fever.

The purpose of this report is to describe a case of bilateral stellar neuroretinitis in a patient diagnosed with classic dengue fever during an epidemic in Natal, Northeast-Brazil, in 2003, as yet unreported in the literature.

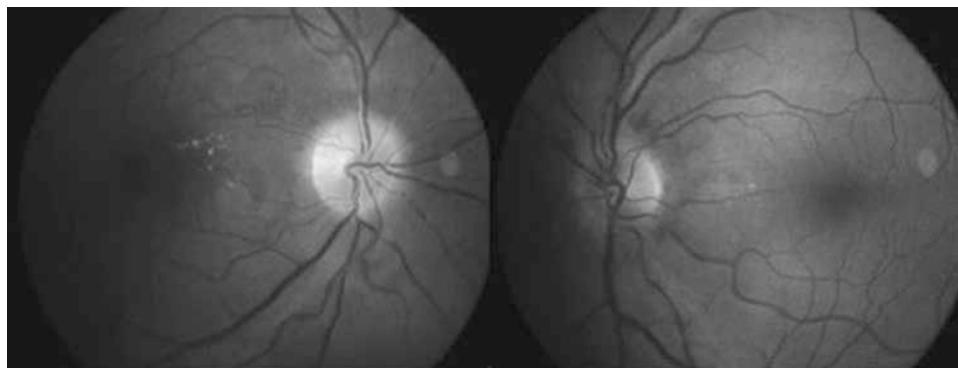
**Case report**

A Brazilian male patient aged 42 years from Natal was referred by an infectologist for assessment of low visual acuity in both eyes for the past 4 days. The patient had been experiencing asthenia, headaches, back pain, retro-orbital pain, skin rash and fever for 12 days and had been clinically diagnosed with dengue fever.

Ophthalmological examination revealed best correct visual acuity: right eye – 20/50, left eye – 20/30; Applanation tonometry: 15 mmHg in both eyes (OU); slit-lamp examination: anterior segment was normal, vitritis (+ / + + + +); and using Volk 78D lens, bilateral papillitis was observed with areas of serous



**Figure 1** Bilateral optic disc swelling with hemorrhages and macular star.



**Figure 2** Bilateral resolution of the optic disc swelling with minimal hard exsudates.

detachment in the posterior pole and in the vascular arcades (Figure 1). Automated perimetry (Humphrey) showed an increased blind spot in both eyes and islands of sensitivity loss in the upper nasal and lower temporal regions of the right eye. Nuclear magnetic resonance of the cranium and the orbits were normal. The diagnosis of dengue fever was confirmed with positive serology (IgM antibodies). The patient remained under clinical and ophthalmological observation and was treated with analgesics. His hematimetric indices were kept under control. After a 2-month follow-up, the clinical picture and the neuroretinitis resolved spontaneously, with improved visual acuity (20/20 in OU) (Figure 2) and disappearance of perimetric alterations.

### Discussion

Sudden low visual acuity syndrome associated to optic disc oedema and macular star exudates is denominated neuroretinitis.<sup>3</sup> Practically all neuroretinitis cases are of infectious origin, with *Bartonella* the main agent involved, causing cat scratch disease in two-thirds of the cases.<sup>3,4</sup> The differential diagnosis reported in the literature is performed with various infectious diseases, such as toxoplasmosis, leptospirosis, mumps, herpes simplex virus, salmonella, tuberculosis, Lyme disease and syphilis.<sup>4</sup> Our report has added another rare diagnostic possibility when neuroretinitis appears in an individual with symptoms of viral infection in a dengue-endemic region.

### References

- 1 Haritoglou C, Scholz F, Bialasiewicz A, Klauss V. Ocular manifestation in dengue fever. *Ophthalmologe* 2000; **97**: 433–436.
- 2 Anargyros E. Cases of ocular complications during dengue epidemic. *Arch Ophthalmol* 1929; **46**: 214.
- 3 Bhatti MT, Asif R, Bhatti LB. Macular star in neuroretinitis. *Arch Neurol* 2001; **58**: 1008–1009.
- 4 Purvin V, Ranson N, Kawasaki A. Idiopathic recurrent neuroretinitis: effects of long-term immunosuppression. *Arch Ophthalmol* 2003; **121**: 65–67.

CA de Amorim Garcia, AHB Gomes and ÁGF de Oliveira

Department of Ophthalmology, Federal University of Rio Grande do Norte (UFRN), Rua Ceará Mirim, 316, Bairro Tirol, Natal, Rio Grande do Norte 59020-240, Brazil

Correspondence: CA de Amorim Garcia,  
Tel: + 55 84 3211 5888;  
Fax: + 55 84 3211 5888.  
E-mail: prontoc.de.olhos@digicom.br

Study performed at the Department of Ophthalmology, UFRN

The authors do not have any commercial or proprietary interest in any of the products or companies cited in the article

*Eye* (2006) **20**, 1382–1383. doi:10.1038/sj.eye.6702219; published online 13 January 2006

---

Sir,  
**Shellfish allergy: a contraindication for fundus fluorescein angiography; misconception or reality**

Shellfish allergy is sometimes wrongly considered a contraindication to Fundus Fluorescein Angiography (FFA). We report a case of a patient with shellfish allergy in which this misconception led to delay in angiogram. The patient was referred to us with suspicion of Choroidal Neovascular Membrane (CNV) in which we performed FFA later without any adverse reaction.

### Case report

A 39-year-old Caucasian lady presented with reduced vision in the left eye for one month. She was referred to us from another hospital about 50 miles away with suspicion of CNV. Fundus Fluorescein angiography was not performed at referring hospital because of a known history of shellfish allergy. The patient had anaphylactic shock after eating shellfish a few years ago. There was no history of allergic reactions to iodine, dyes, or other medicines. Her visual acuity was 6/4 in the right eye and 6/18 in the left. On examination, we noticed a greenish lesion with overlying subretinal fluid in the left eye. We planned to perform FFA to localise and characterise the lesion. Having reassured that the risk of anaphylaxis is very low with FFA, she underwent FFA with no problems and diagnosed as having subfoveal CNV.

### Comment

Shellfish (crustaceans and mollusks) have long been known as a common cause of allergic reactions to food. Like other food allergies, the allergic reactions to shellfish involve IgE-mediated type I hypersensitivity. Biochemical and molecular studies have documented that the major shrimp allergen is the muscle protein tropomyosin.<sup>1</sup> It is an essential protein in muscle contraction both in invertebrates and vertebrates. In