

Public health warnings of solar retinopathy risk in European newspapers prior to the 2006 solar eclipse

Advertencias en periódicos europeos para la salud pública sobre el riesgo de la retinopatía solar antes del eclipse solar de 2006

On March 29, 2006, a major sun eclipse covered areas of South America, Africa, Europe and Asia. A large area of Europe had a partial eclipse and millions eagerly awaited the grand astronomical show. It is well known that direct sun gazing can cause retinopathies entailing loss of central vision (1).

Damages in foveal light receptors can be associated to an irreversible defect in the central vision field. To date, no treatment has been found which has demonstrated that it can improve the results of an established solar retinopathy.

Table I. Warnings in newspapers about the dangers of sun gazing during the eclipse of March 29, 2006

UNITED KINGDOM (maximum eclipse 17% in London, 13% in Manchester)

- number of national newspapers analyzed: 10
 - newspapers which mentioned the eclipse: 4
 - warnings about the risk for eyesight 4 (100%)
 - . safe methods described: 4 (100%)
- Gls 4, PH 3

GREECE (maximum eclipse, 84% in Athens, 75% in Thessaloniki)

- number of national newspapers analyzed: 6
 - newspapers which mentioned the eclipse: 6
 - warnings about the risk for eyesight 3 (50%)
 - . safe methods described: 2 (33%)
- Gls 2, flt 1, PH 2

ITALY (maximum eclipse 50% in Rome, 38% in Milano)

- number of national newspapers analyzed: 6
 - newspapers which mentioned the eclipse: 3
 - warnings about the risk for eyesight 2 (67%)
 - . safe methods described: 1 (33%)
- Gls 1, flt 1

SPAIN (maximum eclipse 25% in Madrid, 33% in Barcelona)

- number of national newspapers analyzed: 6
 - newspapers which mentioned the eclipse: 6
 - warnings about the risk for eyesight 1 (17%)
 - . safe methods described: 1 (17%)
- Gls 1, PH 1

Gls: eclipse eyeglasses; PH: pinhole projection; TV: TV viewing; flt: filter.

Some sun gazing methods which are safer for the eyesight, such as the whole projection system or special lenses (widely advertised as eclipse eyeglasses) are recommended. However, opaque 35mm film or x-ray film is not recommended due to its lack of reliability, while astronomers utilize special filters (2). A public health campaign warning about the dangers of sun gazing has proved to be useful in reducing the prevalence of solar retinopathy (3). This study analyzed whether the appropriate warnings and recommendations were published in European newspapers.

We investigated in twenty-eight newspapers of several countries in which the eclipse was visible to determine whether the risks involved in sun gazing were mentioned and safety measures suggested. We reviewed the morning online editions of the most important national newspapers in four European countries on the date of the eclipse (table I).

A significant proportion of all newspapers did not mention the risk of retinopathy when reporting on the solar event. 53% of the newspapers mentioned the risk for the eyesight when reporting the eclipse (10/19, 53%), while the safe methods were described only by 42% (8/19). A study carried out by Centro América has shown that warnings are effective (2). Therefore, the media must include warnings about solar retinopathy when reporting on upcoming solar events. Newspapers and other media must warn their readers about the risk of direct sun gazing and also describe safe methods for watching solar eclipses.

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