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WHEN THE EYES REACT TO VACCINES!

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Abstract

Immunization is an essential public health tool for improving the health status of the world's population. In our current context of growing resistance to vaccination and recent controversies on this subject, the main concern is the safety of vaccines and their possible adverse effects. The occurrence of ophthalmologic manifestations following vaccination remains infrequent. We report two cases of post-vaccination ophthalmologic reactions. The first case is placoid epitheliopathy secondary to the influenza vaccine and the second is bilateral panuveitis secondary to the BCG vaccine.

Key words:

Vaccines; manifestations; influenza; panuveitis; epitheliopathy.

Introduction :

Immunization is an essential public health tool for improving the health status of the world's population. In our current context of growing resistance to vaccination and recent controversies on this subject, the main concern is the safety of vaccines and their possible adverse effects. The occurrence of ophthalmologic manifestations following vaccination remains infrequent. We report two cases of post-vaccination ophthalmologic reactions. The first case is placoid epitheliopathy secondary to the influenza vaccine and the second is bilateral panuveitis secondary to the BCG vaccine.

Case 1 :

We report the case of a 50-year-old patient who comes for a consultation for a sudden drop in visual acuity in her right eye. In her history, the patient says she received an influenza vaccine one month before her admission. Ophthalmologic examination found visual acuity corrected 1/10 on right eye and 10/10 on the left one, a calm anterior segment and a clear lens in both eyes. Fundus examination found multiple whitish lesions at the posterior pole of the right eye.

Fluorescein angiography finds retinal lesions typical of placoid epitheliopathy with, in the acute phase, lesions appearing hypofluorescent in the early stages, then hyperfluorescent and inhomogeneous in the late stages(picture 1).

The initial biological assessment including VS, CRP, an infectious assessment including serology as well as an immunological assessment returned normal.

The patient received a subconjunctival corticosteroid injection and the course was marked by a rapid improvement in the lesions in the fundus with visual acuity which rose to 7/10 on the right in a few days. A control fluorescein angiography showed scars with rounded atrophies of the pigment epithelium(picture 2).

Case 2:

We report the case of a 35-year-old patient who comes for a consultation for a sudden vision loss, eye pain, eye redness in both eyes. In his history, the patient says she received an BCG vaccine one week before his admission. Ophthalmologic examination found visual acuity corrected 2/10 on right eye and 4/10 on the left eye and bilateral panuveitis with 3–4+ anterior chamber cell with 2–3+ vitreous cell in both eyes. Fundus examination was normal. Laboratory work-up for uveitis was positive for elevated C-re- active protein, and erythrocyte sedimentation rate and antinuclear were negatives. Chest x-ray, angioten- sin-converting enzyme, rapid plasma reagin, rheumatoid factor, and extract- able nuclear antibody study were within normal limits. HLA-B27, Lyme titers , and blood cul- tures were negat Corticosteroid drops every hour and a cycloplegic drop were started. The evolution was marked by a clear clinical improvement and disappearance of intra ocular inflammation after 5 days of treatment.

Discussion :

We report first a case of placoid epitheliopathy secondary to the influenza vaccine. Only one case of placoid epitheliopathy has been previously reported and it was after hepatitis B vaccine.(1) Other reports of involvement after influenza vaccination include bilateral optic neuropathy (2) and oculo-respiratory syndrome. (3).

Then we present a case of bilateral panuveitis after administration of the BCG vaccine. Only two cases of bilateral panuveitis has been previously reported (4) and a case of recurrent uveitis after influenza vaccination(5). Moroever, we reported also uveitis after administration of other vaccines as varicella and hepatitis B. (6) The purpose of vaccines is to elicit an immune response to protect the patient from various infections. These cases show us that, on rare occasions, a fulminant immune response may manifest as differents clinical forms as placoid epitheliopathy and bilateral panuveitis.

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