



Clinical case

Special case of multifocal serpiginous chorioiditis: plaque-like epitheliopathy

Cas particulier d'une Chorioidite serpiginieuse multifocale : épithéliopathie en plaques-like

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Résumé

Nous rapportons un cas d'une fillette de 9 ans présentant une choroidite serpiginieuse multifocale. L'examen ophtalmologique a retrouvé une baisse importante de l'acuité visuelle avec des signes d'une uvéite antérieure et postérieure aux deux yeux. Après un traitement aux corticoïde par voie locale et général pendant deux semaine, la photographie de la rétine a permis de mettre en évidence des lésions chorioretiniennes à multiples foyers bilatérales partant de la tête du nerf optique vers la périphérie rétinienne en respectant les maculas réalisant la classique lésion chorioretinienne serpiginieuse ; avec un début de cicatrisation au centre des lésions. Cette lésion typique survenant chez les sujets relativement adultes est particulière à cet âge. Devant les risques accrus de récurrences une surveillance acharnées est nécessaire. Mots-clés : Choroïdite serpiginieuse, Uvéite bilatérale, Lésions chorioretiniennes, Enfant.

Abstract

We report a case of a 9-year-old girl with multifocal serpiginous choroiditis. The ophthalmological examination revealed a significant decrease in visual acuity with signs of anterior and posterior uveitis in both eyes. After a treatment with topical and general corticosteroids for two weeks, the photograph of the retina revealed chorioretinal lesions with multiple bilateral foci starting from the head of the optic nerve to the retinal periphery, respecting the maculas producing the classic serpiginous chorioretinal lesion; with the beginning of healing in the center of the lesions. This typical lesion occurring in relatively adult subjects is specific to this age. Faced with the increased risks of recurrence, relentless monitoring is necessary.

Keywords: Serpiginous choroiditis, Bilateral uveitis, Chorioretinal lesions, Child.

Introduction

Serpiginous choroiditis is a rare, multifocal, chronic, recurrent inflammatory disorder involving the retinal pigment epithelium, the choriocapillary and the choroid. The lesion typically affects near the optic nerve and extends during recurrences in pseudopodial or “snake” shape, hence the name “serpiginose”. The exact origin of the disease is still unknown. Treatment strategies are also poorly defined [1]. It represents 5% of uveitis except in India where the frequency is 19% of posterior uveitis. The disease occurs between the ages of twenty and seventy with an average age of forty [2].

The disease occurs between the ages of twenty and seventy with an average age of forty [3]. We report a typical case occurring in a 9-year-old girl.

Clinical case

It is a 9-year-old girl referred by her pediatrician for ophthalmology consultation for decreased visual acuity and eye redness in both eyes occurring about two weeks ago. In his history there was acute tonsillitis that occurred in the same period and was treated and cured.

On admission it was in good general condition.

The ophthalmological examination noted visual acuity: the right eye 1/10 and the left eye 2/10 not improved at the pinhole hole. The intraocular pressure is 19 mm hg in both eyes. Slit lamp examination found retrodecemetic precipitates (PRD) in the anterior segment with a cloudy anterior chamber leaving the beginnings of iridolinian synechiae more marked in the right eye. The fundus is blurred, a very dense hyalite rated at 4+ does not show any detail of the bottom.

On ultrasound, a choroid was slightly thickened with an echogen. An etiological assessment (serological: toxoplasmosis, syphilis, rubella and immunological: fibrinogen levels, anti-nuclear antibodies; intradermal reaction to tuberculin) was unremarkable.

After treatment with corticosteroids, eye drops

and oral routes associated with cycloplegia. Two weeks later, there was an improvement with an increase in visual acuity to 5/10 in both eyes and the disappearance of the PRDs. At the back of the eye, chorioretinal lesions with multiple bilateral foci are observed, starting from the head of the optic nerve to the retinal periphery respecting the maculas producing the classic serpiginous chorioretinal lesion; with the beginning of healing in the center of the lesions (Figures 1 and 2).

After a two-month follow-up, vision was 10/10 in both eyes, leaving large inactive chorioretinal scars observed at the back of the eye.

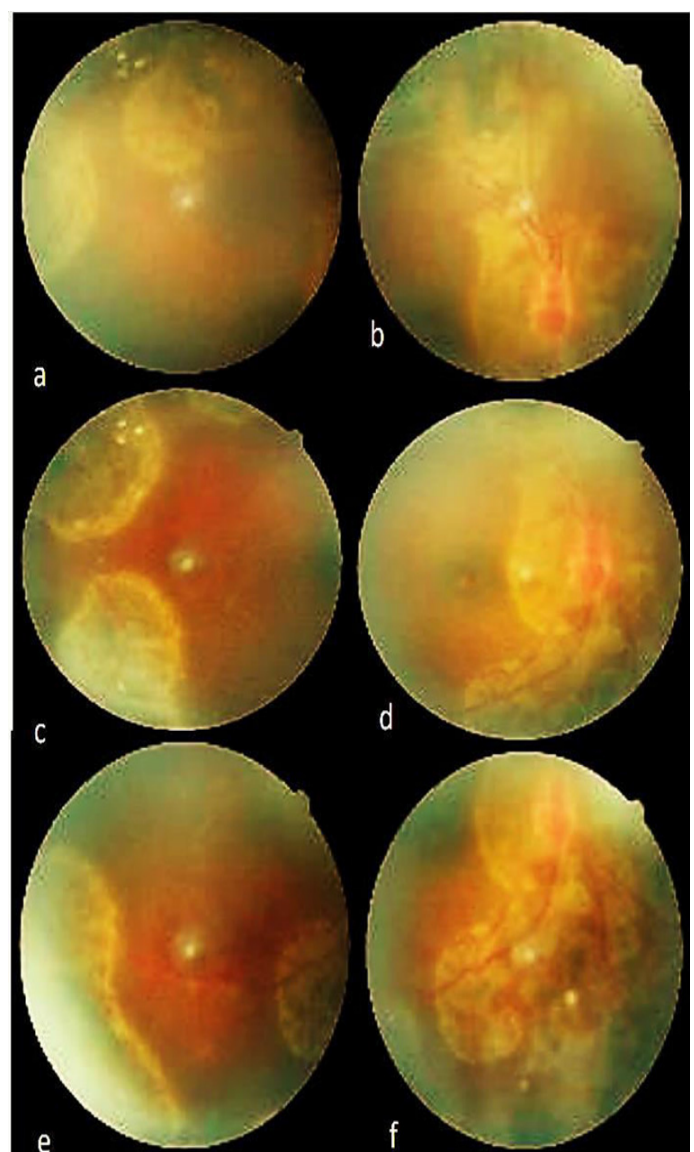


Figure 1: photograph of the right eye:

Yellowish placoid, parapapillary lesions extending in a serpentine manner respecting the macula (b and d) with large peripheral plaques in the process of healing in the equator zone (a, c, e and f)

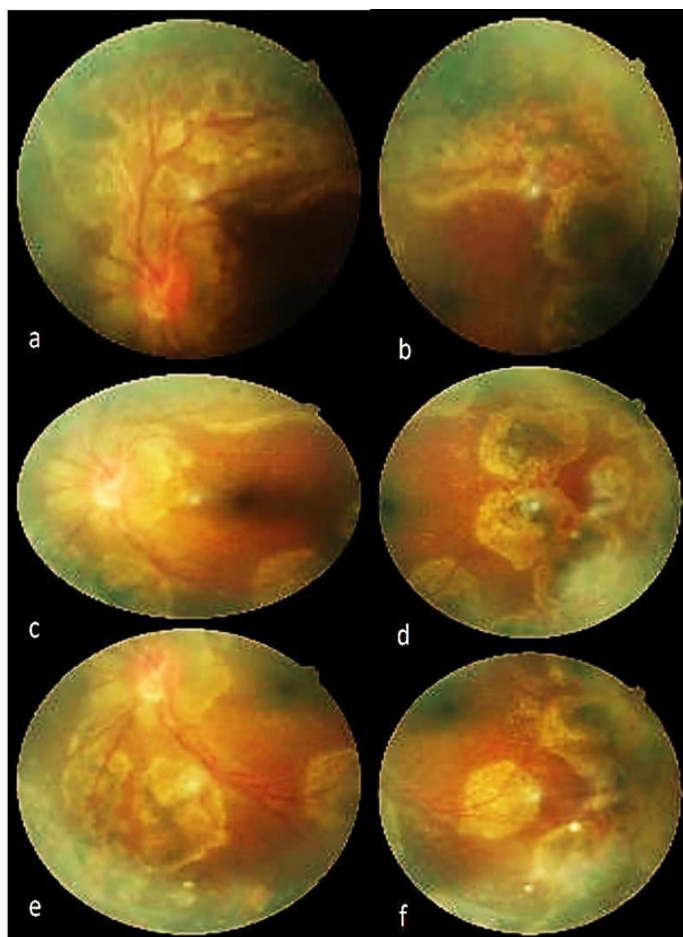


Figure 2 : Photograph of the left eye
Yellowish placoid parapapillary lesions extending in a serpentine respecting the macula (a, c and e) with large deep placoid lesions in the process of healing in the equatorial zone and retinal periphery (b, d and f).

Discussion

The particularity of this clinical form is that it occurs at a very young age (9 years), whereas in the literature its occurrence is between twenty and seventy years of age with an average age of 20 years. The particularity of this clinical form is that it occurs at a very young age. While the literature its occurrence is between twenty and seventy years old with an average age of 20 years [2, 4,5, 6].

The exact origin of serpiginous choroiditis is still unknown, although many hypotheses (infectious, inflammatory, vascular) have been put forward [1]. An etiological search had been carried out in this case in vain.

Typical lesions appear near the head of the optic

nerve and spread following recurrence episodes from the old lesions. In the multifocal form plaque-like epitheliopathy resembles the serpiginous form of chorioretinitis in its bilateral nature, its chorioretinal sequelae, and in its multifocal nature instead of extension from old lesions [7]. Compared to the classic form of serpiginous choroiditis, the multifocal form is rarely accompanied by macular involvement. However, there is no difference in the number of recurrences or the association with anterior or posterior uveitis [8]. We also notice a difference in this girl, respect for the macular regions despite her multiple chorioretinal lesions associated with inflammation of the anterior uvea and dense hyalitis in the acute phase of the disease.

The main characteristic of serpiginous choroiditis is its evolution by insidious flare-ups [3]. The major progressive complication to be feared is subretinal neovascularization in 25% of cases [9].

Conclusion

Multifocal serpiginous choroiditis is similar to the classic form in terms of its clinical and progressive characteristics. Its frequent recurrences make it a pathology to be monitored relentlessly, especially since it occurs at a very young age.

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References

- [1] Palombi K, Romanet JP, Chiquet CH. Serpiginous choroiditis. In: Uveitis. Report of the French Society of Ophthalmology. Paris: Masson; 2010. p. 471–3.
- [2] Chang JH, Wakefield D. Uveitis: a global perspective. *Ocul Immunol Inflamm.* 2020;10:263–79.
- [3] Abrez H, Biswas J, Sudharshan S. Clinical profile, treatment, and visual outcome of serpiginous choroiditis. *Ocul Immunol Inflamm.* 2007;15:325–35.
- [4] Laatikainen L, Erkkila H. Serpiginous choroiditis. *Br J Ophthalmol.* 1974;58:777–83.
- [5] Laatikainen L, Erkkila H. A follow-up study on serpiginous choroiditis. *Acta Ophthalmol.* 1981;59:707–18.
- [6] Weiss H, Annesley WH Jr, Shields JA, et al. The clinical course of serpiginous choroidopathy. *Am J Ophthalmol.* 1979;87:133–42.
- [7] Lyness AL, Bird AC. Recurrences of acute posterior multifocal placoid pigment epitheliopathy. *Am J Ophthalmol.* 1984;98:203–7.
- [8] Jones BE, Jampol LM, Yannuzzi LA, et al. Relentless placoid chorioretinitis: a new entity or an unusual variant of serpiginous chorioretinitis? *Arch Ophthalmol.* 2000;118:931–8.
- [9] Laatikainen L, Erkkila H. Subretinal and disc neovascularisation in serpiginous choroiditis. *Br J Ophthalmol.* 1982;66:326–31.

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