

# Eye as the first manifestation place of various systemical diseases

## Editorial

The eye is often involved in systemic diseases and even, eye may be the first manifestation place of a systemic disease. Some patients having a systemic disease do not awake for their diseases and do not know that they have these diseases because they do not like to be examined by a doctor until the disease affects their daily tasks and life quality. The eyes are actually not only the mirror of the heart but also whole body.<sup>1</sup> Additionally, ocular changes may precede various systemic diseases. To know or aware the ocular signs as the first and common manifestation place of systemical diseases can allow to the physicians to quick reflection to relevant medical branch for screening and research of the presence of the suspected systemical disease. So, this can assist to diagnose the disease in early stages and to prevent serious complications due to the systemical disease.

In this context, some systemic diseases and syndromes, which ocular manifestations might diagnose,<sup>2-9</sup> are as follow:

- a. Hyperviscosity with tortuosity and occlusion in retinal vessels
- b. Myaesthesia gravis with ptosis and diplopia
- c. Hyperlipidaemia with xanthelasma, arcus juvenilis in cornea and presenile cataract
- d. Marfan's syndrome with ectopia lentis (lens subluxation or dislocation), keratoconus and retinal detachment
- e. Anaemia with retinal haemorrhage, Roth spot and cotton wool spot
- f. Leukaemia and lymphoma with orbital disease, uveitis, retinitis and optic nerve infiltration
- g. Atherosclerosis with arteriolar attenuation and vascular compression signs
- h. Malignant hypertension with retinal haemorrhages, hard exudates and cotton wool spots and optic disc edema
- i. Neurofibromatosis (type 1) with eyelid neurofibromas and Lisch nodules on the iris
- j. von Hippel-Lindau disease with retinal capillary haemangioma
- k. Temporal arteritis with anterior ischemic optic neuropathy and retinal vessel occlusion
- l. Grave's Disease with bilateral exophthalmos and diplopia
- m. Behçet Disease with nongranulomatous uveitis and retinal vasculitis
- n. Diabetic retinopathy with diplopia and extraocular muscle palsy
- o. Rheumatoid arthritis with dry eye syndrome and necrotizing scleritis

Volume 7 Issue 4 - 2017

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**Received:** October 03, 2017 | **Published:** October 03, 2017

- p. Juvenile rheumatoid arthritis with uveitis and secondary (uveitic) glaucoma
- q. Sjögren's syndrome with dry-eye and keratoconjunctivitis sicca.

## Conclusion

The eye may be the first manifestation place of various systemical diseases. Thus, the eye is a special organ.

## Acknowledgments

None.

## Conflicts of interest

There are no conflicts of interest.

## Funding

None.

## References

1. Duprez DA. The eye, the mirror of the heart. *Eur Heart J*. 2007;28(16):1915-1916.
2. Urrets-Zavalía JA, Espósito E, Garay I, et al. The eye and the skin in nonendocrine metabolic disorders. *Clin Dermatol*. 2016;34(2):166-182.
3. Lenake M, Du Toit N. The eye in systemic disease. *S Afr Fam Pract*. 2014;56(1):8-14.
4. Şimşek HC, Akkoyun İ, Yılmaz G. Ophthalmic Manifestation of Hematologic Diseases. (Hematolojik Hastalıklarda Göz Bulguları). *Ret-Vit*. 2014;22(2):85-92.
5. Hazin R, Lum F, Daoud YJ. Ophthalmic features of systemic diseases. *Ann Med*. 2012;44(3):242-252.
6. Patel SJ, Lundy DC. Ocular manifestations of autoimmune disease. *Am Fam Physician*. 2002;66(6):991-998.

7. Barra C, Belfort Junior R, Abreu MT, et al. Behcet's disease in Brazil-A review of 49 cases with emphasis on ophthalmic manifestations. *Jpn J Ophthalmol.* 1991;35(3):339-346.
8. Fujita M, Igarashi T, Kurai T, et al. Correlation between dry eye and rheumatoid arthritis activity. *Am J Ophthalmol.* 2005;140(5):808-813.
9. Mohsenin A, Huang JJ. Ocular manifestations of systemic inflammatory diseases. *Conn Med.* 2012;76(9):533-544.