Sub Retinal Deposits as a Complication of Imatinib Mesylate (Gleevec)

Dr. M. Madhavi¹, Dr. G. S. Ramesh Kumar²

M.S., D.O, Ophthalmology, Assistant Professor, Department of Ophthalmology, Siddhratha medical college, Old Government general hospital, Vijayawada Andhra Pradesh, India

MS- Ophthalmology, Associate Professor, Department of ophthalmology, Siddhartha medical college, Old Government general hospital, Vijayawada, Andhra Pradesh, India

Abstract: Background: Imatinib mesylate(GLEEVEC) is effective for a variety of hematologic and nonhematologic malignancies. Well-known ocular side effects are periorbital edema, epiphora¹, extraocular muscle palsy, and blepharoconjunctivitis. However, subretinal deposits has been reported as a complication of imatinib mesylate. Herein, we describe a patient who is on treatment for chronic myeloid leukemia on Imatanib mesylate(400mg) daily since 2 years who developed subretinal deposits during treatment with imatinib. <u>Case Report</u>: A 44-year-old male was referred to ophthalmology for routine checkup. He was ontreatment for chronic myeloid leukemia(imatinib) since 2years. At the initial exam, fundus examination showed subretinal deposits in both eyes, even though visual acuity was 20/20 and other macular function evaluations were within normal limits. <u>Observations</u>: When the patient was followed for 6 week after stopping imatinib there was decrease in subretinal deposits. No other ocular side effects have been noted so far. <u>Conclusions</u>: Subretinal deposits should be considered one of the complications associated with imatinib. We propose discontinuation of the Imatanibfor a short period when subretinal deposits occurs.

Keywords: Imatanib mesylate, subretinal deposits, Chronic Myeloid Leukemia

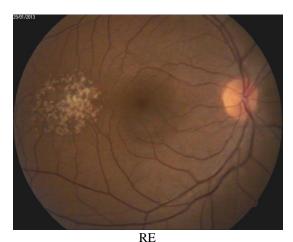
1. Introduction

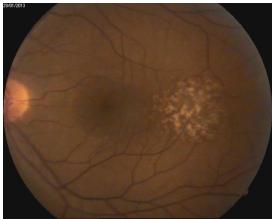
Imatanib is selective inhibitor of BCR-ABL tyrosine kinase and effective in variety of haematologic and non haematologic malignancies. Reported side effects include myalgia, fatigue, nausea, diarrhea, oedema. Well known ocular side effects are periorbital oedema², epiphora¹, extraocular muscle palsy, ptosis, blepharoconjunctivitis. To our knowledge, no published reports of subretinal deposits as complication of imantanib

2. Case Report

A 44 year old male patient came to ophthalmic out patient department for routine checkup. To start with patient was apparentely alright 2 years ago. He was on treatment for chronic myeloid leukemia(Imatanib) since 2 years and not known diabetic and hypertensive. His visual acuity in BE-6/6, near vision: N₁₂. On slit lamp examination anterior segment was within normal limits. After dilatation of pupil with tropicamide eye drops patient was subjected to fundus examination. Fundus examinations of both eyes revealed symmetrical yellowish white discrete, circumscribed sub retinal deposits seen in parafoveal area. Macular functions tests were normal. On fundus flourescien angiography transmission defects were noted.

3. Fundus Photograph





LE

4. Discussion

Periorbital oedema is to date the most common ocular side effect associated with imatinib mesylate epiphora is so far the second most commonly reported ocular side effect of this drug. . To our knowledge, no published reports of subretinal deposits as complication of imantanib. After fundus examination patient was asked to discontinue the drug for three weeks and patient was followed up.When the patient was followed for 6 week after stopping imatinib there was decrease in subretinal deposits. No other ocular side effects have been noted so far.

5. Conclusion

Subretinal deposits should be considered as one of the complications associated with imatinib. We propose discontinuation of the treatment for a short period when subretinal deposits occurs.

6. Disclosure Statement

I certify that all co-authors have read the final manuscript within their respective areas of expertise and participated sufficiently in the study to take responsibility for it and accept its conclusions

7. Source of Funding

None

8. Conflicts of Interest

None

References

- [1] 1.Demeetri GD, von Mehren M, Blanke CD, Van Den Abbeele AD, Eisenberg B, Roberts PJ et al. Efficacy and Safety of Imatinib Mesylate in advanced gastrointestinal stromal tumors. N Engl J Med 2002; 347: 472–480. | Article | PubMed |
- [2] 2. Esmaeli B, Prieto VG, Butler CE, Kim SK, Ahmadi MA, Kantarjian HM et al.Severe periorbital edema secondary to ST1571 (Gleevec). Cancer 2002;95: 881– 887. | Article | PubMed |