

# Letter to Editor

Dear Editor in Chief,

I have the following observations on original article "Assessment of "Imtiaz Sign" for Early Detection of Hypovitaminosis A", Vol. 31, No. 3, Jul - Sep, 2015.

- Starting from the title the word "Assessment of" is superfluous.
- There is not a single reference of Surma which is the main topic. (Ref 1 - 6).
- In Material & Methods it is mentioned about a Dot and Dots, which are these dots?
- It is mentioned that The Surma stains the dots, the color of staining is not mentioned.
- The Bitot's spots get stained with Surma, was it excluded?
- Quantity of Surma used in one application is not mentioned.
- Does any topical drugs (Vitamin A preparations) were used?
- Time duration of application is not mentioned.
- Dyeing or staining end point in not mentioned.
- Chemical composition of Surma is not at all discussed, since the Surma is of many types, few of them are Fe<sub>3</sub>O<sub>4</sub>, ZnO, PbS, Pb<sub>3</sub>O<sub>4</sub>
- Which type of Surma was used in the study.
- In Material & Methods, Authors have mentioned that other signs of Hypovitaminosis A were noted. Contrary to this authors mention in Results section that other sign of Hypovitaminosis A were not observed because of early stage of disease. Which statement should be taken under consideration?
- Only 81% cases were proven for malnourishment by labs and rest were assumed to be malnourished but not proven in any case for Vitamin A deficiency.
- Authors mention that all patients (100%) responded for direct question of visual difficulty in dim light (Nyctalopia). While 24% patients were in age group 5 - 10 years and another 46% were between 11 - 20 years of age. How these young patients responded to questions of night blindness in very early stage.
- Dark adaptation threshold and X Ray of long bone have been done in how many cases and why?
- There is no mention as to how it is determined that "Imtiaz Sign" occurs before Bitot's spot.

- How a study can be scientific where laboratory test were done on selected cases only.
- Was Hepatitis B & C excluded in this study which is prevalent in the area of study.
- How it is concluded that sub clinical deficiency of Vitamin A gets stained with Surma.
- In this study, were the same patients given Vitamin A were stained again with Surma to confirm its logic.
- It is not mentioned in the study of 650 patients that how many had Bitot's Spot.
- How 650 patients were graded of Vitamin A deficiency by WHO criteria.

## REFERENCES

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**Prof. Shahid Wahab  
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## Author's Response

My this communication is in response to the letter to Editor by Prof Shahid Wahab. It seems that Prof. Wahab misunderstood the very perspective of this scientific paper. This paper is purely a scientific work to help and save ailing humanity particularly in underdeveloped world to prevent unnecessary blindness and death<sup>1</sup>.

1. He says the word "Assessment" is superfluous? The word assessment means "Analysis of the

security, effectiveness, and potential of an existing or planned intelligence activity"<sup>2</sup>.

2. He has wrongly interpreted that "surma" is the main topic, he has missed the other staining material "Kajal" which is mentioned in the article.
  3. He has raised question about stained dot or dots, which is clearly mentioned that due to deficiency of Vitamin A in the body, epithelia are affected including epithelium of conjunctiva. The epithelial defects take up stain which indicate vitamin A deficiency in the body. There is no existing sign which can pick up vitamin A deficiency in the body at this early and reversible stage.
  4. He has raised the question of topical use of vitamin A in the eye which is not relevant as this negligible amount of vitamin A in the eye ointment cannot be considered for replenishing vitamin A stores in the body.
  5. He has raised the question of quantity of surma used in one application, whereas it is described clearly in the paper that "staining of a dot or few dots of nasal or mostly temporal conjunctiva with surma (eyelash dye used for religious belief in men, women and children particularly in Muslims) or kajal (eyelash dye used for cosmetic purpose) indicates early / subclinical stage of Vitamin A deficiency."
- These materials were not used by authors but by patients themselves.
6. He has raised the question of time duration of application which is not applicable as these stains were used by the patients themselves and not by the authors.
  7. He has raised the chemical composition of surma and types of surma utilized in the study, however it is clearly mentioned that both stains "surma and kajal" were utilized by patients themselves and not by authors who picked up the sign only. However if he is interested to find different chemical compositions of surma or kajal being utilized by people in Pakistan, he may conduct this study and add in our knowledge.
  8. He has raised the question of dyeing and staining end point which is not relevant as these stains were used by the patients themselves and NOT by the authors.
  9. He has raised the question of contradiction in the **Methods** and **Results** regarding signs of vitamin A deficiency but he has misunderstood the

sentence, the signs mentioned in **methods** were to be noted if present in the patients under study but were not present as mentioned in the **results**. Interestingly this very important point is emphasized in the study which makes "Imtiaz's sign" useful.

10. He has raised the question regarding the diagnosis of remaining 19% of cases of vitamin A deficiency as only Lab. evidence of 81% is mentioned in the study, however he has forgotten that remaining 19% patients had Nyctalopia and they improved with vitamin A supplements which was taken up as therapeutic test (diagnostic evidence) already mentioned in the article.
11. He has raised the question of how night blindness was picked up in age group 5 years to 20 years but he has forgotten that this is verbal age group and they can tell themselves about their difficulty in dim light, however to make it more clear to him, parents of those children were the source of information who could not express themselves.
12. He has raised the question as to why Dark adaptation threshold and X-ray of long bones was performed? however it is clearly mentioned in the paper that " Dark adaptation threshold<sup>3,4</sup> and X-ray of long bones<sup>6</sup> were performed to determine excessive deposition of periosteal bone<sup>5</sup> which is sign of vitamin A deficiency.
13. He has raised the question that "there is no mention as to how it is determined that **Imtiaz's Sign** occurs before development of Bitot's spot". However he has forgotten that this study is emphasizing this very point from beginning to the end and I hope that he does not want us to leave the patients to develop the late signs like Bitot's spot.
14. He has raised the question that whether Hepatitis B & C were excluded in the study? However it is clearly mentioned in the article that Liver disease was excluded.
15. He has raised the question that whether staining with surma was done after vitamin A was given? however it is mentioned clearly that the stains were used by the patients themselves and "administration of dietary or therapeutic supplements of vitamin A quickly resolved these stained areas and also resolved associated symptoms of vitamin A deficiency". As the patients using these stains for religious or cosmetic purpose keep on using these stains but after

vitamin A use they no more encounter "Imtiaz sign".

16. He has raised the question that "it is not mentioned in the study of 650 patients that how many had Bitot's spot/ "but the article mentions that "650 patients, 152 (23.38%) males and 498 (76.62%) females were identified as cases of hypovitaminosis A on the basis of presence of Imtiaz's sign" and NOT on the basis of late signs including Bitot's spot, therefore there is no question of presence of Bitot's spot in the study.
17. He has raised the question that "how 650 patients were graded of vitamin A deficiency by WHO criteria?" however, this study is specifically conducted to document the earliest sign of vitamin A deficiency which is NOT included in WHO criteria and has been reported recently therefore will take some time to be included hopefully in WHO criteria.

## REFERENCES

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