



## Brandt Syndrome

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### Abstract

*Brandt syndrome presents with a triad of periorificial dermatitis, alopecia, and diarrhea in weaning infants, more so on soy milk as high phytate concentrations inhibit zinc absorption. Here is the child who had acute gastro enteritis and started on formula feeds developed periorificial dermatitis. Diagnosed as Brandt syndrome and rapidly improved with zinc supplementation.*

### Case Report

A six month old male child, born at first order to non consanguineous parents, presented with loose stools and vomiting for four days, one month ago. The infant was treated by a local practitioner symptomatically and was put on formula feeds (soy milk) in view of persisting loose stools. They presented to us with skin rash, persistent watery stools and decreased scalp hair since 1 month. The child was immunized appropriately and developmentally normal.

On examination, child was well thriving and skin lesions were typically per oral and perianal desquamative plaques with blisters and red and inflamed patches of dry scaly skin with sharp demarcation.





**Figure 1:** Typical skin lesions



**Figure 2:** Response to Zinc Regimen: 1 week later

Our suspicion of Brandt syndrome was proven by therapeutic zinc regimen of 2 mg/kg body weight yielded diagnostic response in 72 hours with complete resolution in one month.

Brandt syndrome first described in 1936 presents with triad of periorificial dermatitis, alopecia, and

diarrhea in weaning infants, more so on soy milk as high phytate concentrations inhibit zinc absorption.<sup>(1)</sup>

It is much under diagnosed and unreported in our region though prevalence of inadequate intake >25 % and risk for zinc deficiency is high based on global studies. Prevalence of stunting among young children can be used as an indirect indicator of population zinc status.<sup>(2)</sup>

A deficiency disorder which is progressive and potentially lethal, however completely curable, needing a high degree of suspicion. Laboratory diagnosis is often hazardous, and inconclusive and therapeutic zinc regimen challenge being diagnostic and therapeutic even today<sup>(3)</sup>

Rapid response is seen with Zinc supplements. The lesions become smaller and paler after 2 to 3 days of treatment and complete resolution of the triad within 6-8 weeks. Untreated progression follows severe growth retardation, malnutrition and failure to thrive, secondary infections, psycho neurologic deterioration, eventually early childhood demise.<sup>(3)</sup>

### References

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