



## Short Case Report

# A case report on ichthyosis vulgaris with seborrhoeic dermatitis

Anees Sefrin S. \*, Aparna Jayadevi Rajendran and Zachariah Thomas

Department of Pharmacy Practice, The Dale View College of Pharmacy and Research Centre, Thiruvananthapuram, Kerala, India  
sefrinscyad1234@gmail.com

Available online at: [www.isca.in](http://www.isca.in)

Received 9<sup>th</sup> May 2019, revised 13<sup>th</sup> September 2019, accepted 25<sup>th</sup> September 2019

## Abstract

*Ichthyosis vulgaris is a keratinizing disorder that can leads to the accumulation of dead cells on the skin surface causing dry, scaly and thick skin. It can be inherited or acquired type skin disorder and usually more common and appears on the hands and lower legs. The prevalence of ichthyosis vulgaris estimated at 1 in 300000 in India and both males and females get equally affected. The clinical signs and symptoms include flaky scalp, itchy, dry and thickened skin, scales in the skin surface coloured of brown, grey, or white. Symptoms can be reduced by regular bathing and applying of moisturizer keeps the skin from drying out. This case discusses an 18 year old pleasant girl presented with the symptoms of high grade fever, worsening breathlessness and wheeze of 4 days duration, hyper pigmented lesions over hands and legs. She had history of lower respiratory infection (LRI) episode 10 years back and treated with oral antibiotics, steroids, bronchodilators and nebulizers. The symptoms showed by the patient were classical to ichthyosis vulgaris with seborrhoeic dermatitis thus confirming the same as diagnosis.*

**Keywords:** Ichthyosis vulgaris, Kegel's exercise, Hyperpigmented lesion.

## Introduction

Ichthyosis vulgaris is a genetic or acquired skin condition characterized by dry, itchy and thick scaly skin<sup>1</sup>. The prevalence of ichthyosis vulgaris is estimated at 1:300000 in India. Both males and females get equally affected<sup>2</sup>. Ichthyosis can be hereditary or acquired and clinically not appear during child birth and can be presented in later years<sup>3</sup>. Ichthyosis can be classified based on the clinical symptoms and genetic manifestation and histologic findings. It is caused by mutation in the coding of the *filaggrin gene* (FLG) which is a filament aggregating protein act as a barrier against various environmental allergens, infections and water loss<sup>4</sup>. According to the severity, symptoms can be vary from mild to severe. The signs and symptoms tends to get worse in winter season<sup>5</sup>. In adults, the ichthyosis is usually caused due to some disease or medicine<sup>6</sup>. Ichthyosis vulgaris can be also occur along with other skin conditions such as seborrhoeic dermatitis, atopic dermatitis.

**Case Presentation:** An 18-year-old pleasant girl with complaints of high grade fever, worsening breathlessness and wheeze of 4 days duration. She had history of lower respiratory infection (LRI) 10 years back and was treated with oral antibiotics, steroids, bronchodilators and nebulizers. Based on the clinical examination, the patient was diagnosed with Ichthyosis vulgaris, Seborrhoeic dermatitis and Asthma. On admission, patient was conscious, oriented and hemodynamically stable but dyspneic. Gynecologist was consulted for pelvic mass after coughing and was advised kegel's exercises which helps to strengthen the pelvic floor

muscles. Dermatologist was consulted for hyper pigmented lesions over hands and legs and treated with venusia max cream twice daily as skin protector, derma dew soap was used to prevent dryness of skin, scalp lotion twice weekly and candid B cream twice daily helps to control itching. On the 4<sup>th</sup> day, apnea and wheezing were improved. Patient developed vomiting, nausea and loose motion on the day of planned discharge. Gastroenterologist was consulted and advice followed. On the day of discharge, patient was symptomatically improved and clinically with above measures. She was scheduled for a follow-up after 10 days from the date of discharge.

## Discussion

Ichthyosis vulgaris is a keratinization disorder with prevalence of 1: 300000 in India. It does not clinically appear at birth and may be presented later in life<sup>7</sup>. *Filaggrin* is a filament aggregating protein which act as a skin protecting barrier<sup>8</sup>. Patient with this condition can lose this protective barrier, so moisturizer with glycol and urea can helps to prevent the worsening of ichthyosis vulgaris<sup>9</sup>. Indications of ichthyosis vulgaris include the visible scaling, dry and thick skin. It should have a strong disposition to allergic disease comorbidities such as asthma and seasonal allergies. The main goal of ichthyosis vulgaris therapy is to remove the excess scales without causing more irritation<sup>10</sup>. Typically ichthyosis can be confirmed by a dermatologist and may also perform blood tests or biopsy to rule out other skin conditions such as psoriasis have showing same symptoms. In this case, the patient was treated with venusia max cream twice daily for legs and hands, derma dew soap to avoid dryness of skin, scalp lotion and candid B were given to control itching.

## Conclusion

Ichthyosis vulgaris is a long term skin disorder that can affect the quality of life of patient when it is untreated. In this case, the disease was diagnosed based on the clinical presentation shown by the patient. During follow up, the patient was conscious and had no new complaints and same treatment were provided.

## References

1. Leight H., Zinn Z. and Jalali O. (2015). Bilateral lower extremity hyperkeratotic plaques: a case report of ichthyosis vulgaris. *Clinical, cosmetic and investigational dermatology*, 8, 485-488.
2. Patil A., Patil S.J., Shigli A.L. and Mehta S.D. (2016). A case of ichthyosis vulgaris and its dental manifestations. *J Med Surg Pathol*, 01(04).
3. Zhong W., Cui B., Zhang Y., Jiang H., Wei S., Bu L. and Kong X. (2003). Linkage analysis suggests a locus of ichthyosis vulgaris on 1q22. *Journal of human genetics*, 48(7), 390-392.
4. Sandilands A., Sutherland C., Irvine A.D. and McLean W.I. (2009). Filaggrin in the frontline: role in skin barrier function and disease. *J Cell Sci*, 122(9), 1285-1294.
5. Uptal Nandy, Jayashree Nath Barbuiya B. Harza and Banarjee P.P. (1997). Clinical pathological study of ichthyosis vulgaris. *Indian J Dermatol*, 42(2), 75-77.
6. Ichthyosis vulgaris (2019). American Academy of Dermatology. Aad.org. 2019 [cited 2 May 2019]. Available from: <https://www.aad.org/public/diseases/scaly-skin/ichthyosis-vulgaris>
7. Thyssen J.P., Godoy-Gijon E. and Elias P.M. (2013). Ichthyosis vulgaris: the filaggrin mutation disease. *British journal of dermatology*, 168(6), 1155-1166.
8. Takeichi T. and Akiyama M. (2016). Inherited ichthyosis: Non-syndromic forms. *The Journal of Dermatology*, 43(3), 242-251.
9. Mertz S.E., Nguyen T.D. and Spies L.A. (2018). Ichthyosis Vulgaris: A Case Report and Review of Literature. *Journal of the Dermatology Nurses' Association*, 10(5), 235-237.
10. Leight H., Zinn Z. and Jalali O. (2015). Bilateral lower extremity hyperkeratotic plaques: a case report of ichthyosis vulgaris. *Clinical, cosmetic and investigational dermatology*, 8, 485.