

Palliative Care and Supportive Physiotherapy to Pemphigus Foliaceus

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ABSTRACT

Pemphigus foliaceus (PF) is a group of immunobullous illnesses that are clinically relevant, if left untreated, they can result in severe morbidity and mortality. To give the supportive physiotherapy treatment to the patient with Pemphigus foliaceus all over body. Kinesiotherapy, in addition to pharmacological therapy and breathing exercise used to improve the quality of life. Have given the tertiary care to the patient and patient education to the relatives. Kinesiotherapy helped improve the quality of life along with breathing exercise increased the life expectancy.

Keywords: Pemphigus, foliaceus, kinesiotherapy, breathing exercise, Palliative care

INTRODUCTION

Pemphigus foliaceus (PF) is a group of immunobullous illnesses that are clinically relevant because, if left untreated, they can result in severe morbidity and mortality.¹

At the commencement of Pemphigus foliaceus (PF), the disorder is most typically seen on the face, head, chest, and back.²

There is a sporadic form and a related endemic form that is mostly found in Brazil and North Africa.³ Family members of those with pemphigus foliaceus who are exposed to the sun and are bitten by insects (in South American countries) are the source of its transfer to humans.⁴

Kinesiotherapy, in addition to pharmacological therapy, is a supplemental intervention that was originally used to improve the quality of life of patients with various disorders.⁵ Although the impact of

physical activity on immune responses is not fully understood, changes in circulating cytokines are visible just after, a few hours later, or even days after physical activity. The pemphigus foliaceus is localized with lesions typically developing on the face and the upper trunk and back.⁶

MATERIALS & METHODS

A 43-year-old male patient presented to the department with the lesion over trunk, scalp, bilateral thighs, genitals, oral cavity since 4 and half months. Patient having on and off fever for 4 months and oral ulcers associated with pain and difficulty in swallowing for 4-5 days.

The patient had a history of diabetes for 4 months and hypertension for 6 years and was on medication. He was not having any allergies towards dust, drugs and food. The

patient developed fluid filled lesions a tendency to break and form non healing raw areas which were not associated to any complaints, present over upper chest, scalp, chin 8 days following which the patient went to nearby doctor at a place for the same and was prescribed phenylephrine (50) 1OD *15 days, T. methylprednisolone 2mg 1BD*10 days following lesions progressed in size and there was no improvement so they went to another doctor at Aurangabad after 15 days. Who prescribed candid powder locally. During period of one month, lesions became associated with crusting and oozing following which they went to a local doctor where patient was given IVF for 10 days and other medication (Octasis NA) following which lesions progressed to neck and back associated with oozing. Then patient preferred other doctor who prescribed T. prednisolone 30mg 1OD*7 days, T. Amoxiclav 625 mg 1BD*7 days, Fucidin cream LABD *7 days following patient which took T. prednisolone 60mg 1OD (1 dose), T. Cefixime 100mg 1BD*1 day, T. metronidazole 400mg for lesions associated with oozing and bleeding.

Patient went to other doctor at Jalna the following day and was prescribed T. Taxim 1BD*8 days, Tab. Avil 1BD*8 days, KT2 cream LABD * 8 days following which patient developed oral lesions associated with pain and difficulty in swallowing following which patient came to MGM hospital as referred for further management.

Diagnostic Assessment

On general examination- Pitting oedema was present bilaterally over hands and feet
Range of Motion – painful and incomplete range of motion

On local examination-

Upper limb- multiple erosions and oozing with crusting present over bilateral axilla and bilateral inner arms

Lower limb- few erosions with oozing with crusting present over bilateral inner thighs.

Trunk- multiple erosions with oozing with crusting present over trunk

Scalp- few crusted erosions with oozing present over scalp

Hair- malting of hair present

Face- multiple crusted erosions with oozing present over right side of forehead, cheek, chin. Bilateral anterior masses, whole submandibular region

Oral cavity- few whitish plaques bilateral buccal mucosa, single erosion over inner aspect of lower lips.

Single erosion in right buccal mucosa posteriorly – few erosions over tongue

Eye- few crusted erosions with oozing present over bilateral perirenal region.

Discharge present in bilateral eyes.

Genitals- few crusted erosions with oozing present over bilateral groin folds and serotine macerations present over bilateral groin folds.

A 14 kg loss in the weight was seen over last 4 months. Nikolsky sign showed positive sign. On histological examination, Pemphigus foliaceus shows acantholysis of the upper epidermis and intercellular IgG deposition throughout the epidermis on DIF. Anti-Dsg1, an epithelial desmosome-targeting pathogenic autoantibody of PF. On culture and sensitivity microbiology swab test showed pseudomonas aeruginosa and blood test presented klebsiella pneumonia. Review of the patient after 3 weeks showed incomplete resolution and the healing was uneventful.

Therapeutic Intervention

Kinesiotherapy, a type of physical treatment, has been linked to improvements in pain and other aspects of life quality.⁷ The physiotherapy when precociously done can prevent the formation of cutaneous adhesions and muscular weakness, preserving the range of motion present in diseases with an intense healing process such as endemic pemphigus foliaceus.⁸ Breathing exercise may result in positive response when adapted to cardiorespiratory system and endocrine metabolic system. Figure 1A, B, C, D and E shows the presence of pemphigus all over the body.



Figure 1A: Multiple crusted erosions on the cheek. 1B: Malting of hair and oozing over right forehead. 1C: Few crusted erosions with oozing over scalp 1D: Multiple erosion over bilateral axillae 1E: Crushing present over bilateral inner arm

RESULT

1. The palliative care helped the patient to understand the disease and cope with the day to day living with smaller but beneficial changes.
2. It at least helped the patient to increase the life span with the following improvement.
3. Kinesiotherapy improved the pain from 9 to 7 on NPRS
4. Breathing exercise also helped the patient in cardiorespiratory and endocrine metabolic system to have some improvement.
5. And increased range of motion from the previous range was seen.

DISCUSSION

When the skin is wiped sideways with a cotton swab or a finger, it shears off easily, which is a good Nikolsky's sign. This case is classified as Pemphigus Foliaceus based on both subjective and objective evidence. In our study Physiotherapy support and palliative care can maximize life days and improve daily activities helped in breathing exercise.

Alizadeh et al (2021) concluded that the women were more affected than men by sex differences in patients' general health state, according to many research, but some did not find this link. As a result of the small sample size, the results cannot be generalized. Unfortunately, there were no other subtypes of this condition; all patients had pemphigus vulgaris. Because of this, it was unable to link the type of sickness and General Health Questionnaire. In our investigation, there was a correlation between GHQ and the disease severity score.⁹

Kunadia et al (2022) concluded in one study that the various treatment plans included

both topical and systemic medications. The research indicates that systemic dapsone and topical therapy may be effective in controlling localized PF, which is an uncommon condition.¹⁰

Wattanawinitchai et al (2023) advocated in his study that autoantibodies directed against plakin proteins may be responsible for acantholytic alterations in the respiratory epithelium, pulmonary epithelial damage, and progressive respiratory failure in paraneoplastic pemphigus, according to evidence so far. Benefits of intensive resistance training in patients with chronic polymyositis or dermatomyositis have been seen so can be done with pemphigus foliaceus. Due to the fact that DN's clinical characteristics can fluctuate and mirror a number of dermatological conditions, including seborrheic keratosis, verrucous nevi, psoriasis vulgaris, crusted scabies, and pigmented basal cell carcinoma, DN is commonly misdiagnosed.¹¹

CONCLUSION

Pemphigus has a variety of triggers that should be examined in order to prevent pemphigus in genetically susceptible persons or worsening of the disease. Pemphigus is induced by a variety of medicines and treatments, according to a significant number of recorded instances. Furthermore, many types of autoimmune disorders and malignancies have been linked to an increased sensitivity to pemphigus development. Physiotherapy support and palliative care can maximize life days and improve daily activities helping in breathing exercise and taking active and passive mobilization. further studies and research are needed.

Declaration by Authors

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