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## A CASE STUDY AND SHORT REVIEW ON BULLOUS PEMPHIGOID

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### ABSTRACT

Bullous Pemphigoid is an auto-immune rare disorder occurring both in male and female with more number among females. It comprises of bullae, blisters, lesions formation in the oral mucosa, genital mucosa and other regions where its healing takes a lot of time. The exact etiological cause of Bullous Pemphigoid is not known. More than 70-90% of cases have reports with oral mucosa being initially affected with bullae and plaque like formation. The conditions have chances of recurring in some patients where the therapy monitoring should be adjusted with its non-recurrence. The given case study highlights Bullous Pemphigoid condition in a 52 year old female patient with bullae formation and plaque erosions present in her oral mucosa, regions with vegetative folds like genitals, axilla, trunk region, intermammary folds etc. Scalp was also presented with belb like erosions. Therapy was initiated with Anti-bacterial's, Corticosteroids, topical creams, and vitamin and calcium supplements. Antifungal agents were also included in the therapy. Later on Antibacterial was replaced with Immunosuppressive agents like Azathioprine. Initial identification of the condition with proper maintenance therapy helps in resolving from the condition.

### KEYWORDS

Bullae, Blisters, Eruptions and Pemphigoid.

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### INTRODUCTION

Bullous Pemphigoid refers to the blistering and erosion of the skin and mucous membrane<sup>1-3</sup>. It is a rare chronic intra-epidermal bullous disease classified as type II hypersensitivity reaction which attacks Desmosomes (components of the skin functioning to keep certain layers of the skin together bound) with the formation of antibodies. Thus appearance of blisters occurs with the separation of skin layers<sup>4-8</sup>.

It is a chronic mucocutaneous disease manifesting from the oral cavity and spreading to the skin and other mucous membranes<sup>9-12</sup>. It is life threatening immunopathologic dermatologic disease occurring in people at the age of 50-80 years<sup>13-15</sup>. The bullae present intraepithelially are flaccid and easily ruptured, present at skin and mucous membranes. Places liable for mechanical irritation are most commonly affected in the oral mucosa<sup>16-19</sup>. The lesions are generally belb like blisters or diffuse gelatinous plaques which are non-painful, rupturing at the initial stage by slight rubbing or a small mucosal trauma<sup>20-23</sup>.

This disease condition is known from the period of Hippocrates and Galen's description among which it is more fatal<sup>24-27</sup>. Diagnosis with the help of immunofluorescence and antibody assay helps in probably identifying the etiopathologic factors contributing towards the condition and an empirical therapy to be fixed<sup>28-31</sup>. Patients face problems with chewing of food and increased salivation occurring which are the most commonly reported complaints. Known mechanism of Bullous Pemphigoid<sup>5,7,18,25,29</sup>:

### CASE PRESENTATION

A 52 year old female patient was admitted to the hospital it chief complaints of fluid filled lesions present in oral and other mucosal regions of the body for the past 3 months. She had a history of spontaneous rupture of lesions with burning sensation over the erosions with less itching oral lesions present on her gingival and buccal regions. She was Diabetic but was not on treatment. She belonged to a low socio-economic class category. On general examination the patient was conscious, oriented and afebrile.

On physical examinations she had bullae present on various folds of her body. Lower extremities consisted of multiple flaccid bullae of varying sizes distributed in trunk with indirect Nikolsky's sign being positive. Multiple row areas with peripheral edges were seen showing no tendency to heal over axilla intermammary regions. Multiple hyperpigmented plaques and patches were present unbiased over the body. Crusted blisters were present on her tongue which remained unhealed.

Tiny erosions of plaques were present on lower trunk, genital regions, groin regions and axilla. Retromolar trigone and buccal mucosa presented ruptured bullae. Scalp was presented with small belbs and crusted blisters which were ruptured. Her nails had slight paronychia appearance slightly extended towards the fingers [Figure No.1]

Culture studies revealed that the patient was resistant to Cotrimazole, Ampicillin, and Amoxicillin, sensitive to Amikacin, Norfloxacin, Ciprofloxacin, Chloramphenicol, Ofloxacin. Presence of *staphylococcus aureus* was identified through culture studies.

### DISCUSSION

On the day of presentation of the patient to the hospital, she was prescribed with T. Augmentin (Amoxicillin + Clavulanic acid) 625mg TID, T. Wysolone (Prednisolone) 30mg OD, Cap. Fesovit (Ferrous Sulphate, Folic acid and Vitamin B), Iron supplement OD, T. Pantop (Prantoprazole) 40mg OD, T. Shelcal (Calcium Carbonate) 500mg BD, Emoderm cream (white soft paraffin and liquid paraffin) emollient TID. After three days the bullae were found to decrease in size and itching reduced much far better. She was asked to repeat the same medication with few Antibacterials added to her prescriptions. They were T. Taxim-O (Cefixime) 200mg BD, Inj. Dalacin-C (Clindamycin phosphate) 600mg BD and Antifungals like Inj. Fluconazole 200mg OD, Soframycin cream (Framycetin-sulphate) BD, T. Zental (Alendazole) 400mg OD, T. Decadron (Dexamethasone) 4mg BD, T. Dolo (Acetaminophen) 650mg SOS. Later on Candid mouth paints (Clotrimazole) TID, Syp. Potklor (Potassium Chloride) Potassium supplement 5ml TID, were added on. Saline soaks were used over the crusted lesions.

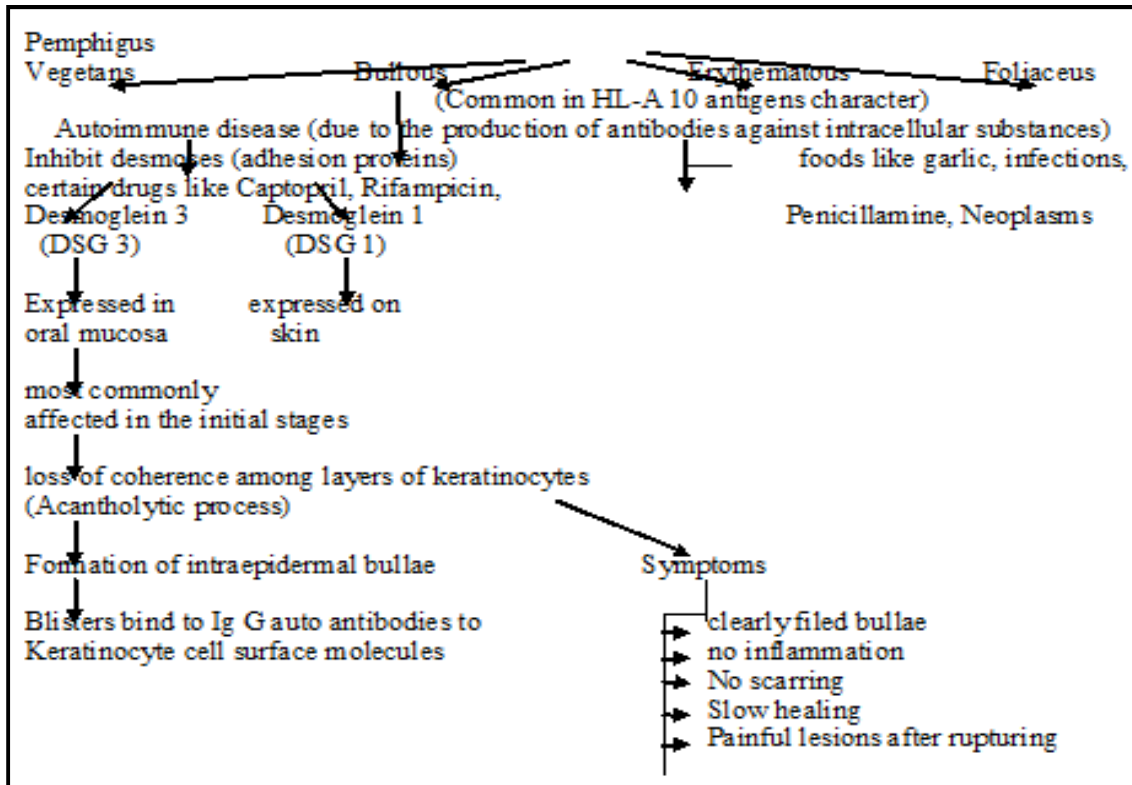
Through physical examination and appearance of bullae, it was clearly predicted that the patient had Bullous Pemphigoid and culture studies were carried out revealing her sensitivity and resistance. Multiple drug therapy was given in order to resolve the symptoms as there was no known etiological cause of the condition. Along with the various medications given, Immunosuppressive agents like Azathioprine

100mg OD was replaced instead of Augmentin, Cefixime due to its resistivity in the patient. Immunosuppressive agents would be appropriate due to the auto-immune nature of disease state. OTC products like Syp. Digene was recommended by clinical pharmacist to be avoided.

Having a healthy diet plan to built up the immunity strong along with Calcium, Vitamin supplements, antibacterial, antifungal agents would help overcome the symptoms and condition. Maintenance therapy with Corticosteroids and Immunosuppressive agents has proved benefit.

**Table No.1: Laboratorial values of the patient**

S.No	Diagnostic parameters	Patients value	Normal values	Inference
1	PCV	43.4%	41-59%	Within limits
2	WBC	9500cumm	4000-11000cumm	Within limits
3	RBC	3.69mill/cc	3.8-4.8mill/cc	Decreased
4	Hemoglobin	11.6 g/dl	12-17 g/dl	Decreased
5	MCV	88.9fl	76-96fl	Within limits
6	MCH	31.4pg	27-32 pg	Within limits
7	MCHC	35.4	31-35	Within limits
8	Platelets	2.47lakhs/cumm	1.5-4lakhs/cumm	Within limits
9	Lymphocytes	28%	20-40%	Within limits
10	ESR	09 min	5-20mm/hr	Within limits
11	RBS	256mg/dl	80-140m/dl	Increased
12	Urea	24 mg/dl	7-18mg/dl	Increased
13	Creatinine	0.6mg/dl	0.6-1.3mg/dl	Within limits
14	Blood group	O+ ve		
15	BMI	27.8		
16	VDRL	-ve		
17	Sodium	0.7mmol/l	0.6-1.3mmol/l	Within limits
18	Potassium	3.6 mmol/l	3.5-5mmol/l	Within limits
19	Neutrophils	63.7%	40-80%	Within limits
20	Monocytes	8.3%	2-10%	Within limits
<b>Other vitals</b>				
21	Temperature	98.6F	98.4F	Within limits
22	Pulse rate	90/min	72-75/min	Increased
23	Respiratory rate	22/ cycles	12-20 cycles	Increased
24	Blood pressure	120/80 mmHg	130/85mmHg	Within limits



A



B



C



D



E

**Figure No.1: Bullae and blisters present on various parts of vegetation growing regions in patient**

## CONCLUSION

Health care professionals could play an empirical role by early identification of the condition with proper histopathological and immunofluorescence therapy and management of the condition. Therapy involves both loading phase - to control the disease condition and maintenance phase - consisting of consolidation and treatment tapering. Locally making use of mouth paints, ointment, mouth wash, pastes could be made use of. Medications with lower dose and shorter period of time could be made use of to avoid side effects and complications.

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## CONFLICT OF INTEREST

We declare that we have no conflict of interest.

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