Bullous pemphigoid (BP) is a type of autoimmune bullous disease with recurrent cutaneous bullous lesions that mainly occurs in the elderly. The aetiology of this disease could be idiopathic or in association with medications, physical stimuli such as radiation therapy and etc. The occurrence of bullous pemphigoid in renal transplanted patients is not common and only a few cases have been reported so far. In the present study, we reported a case of BP in a renal transplant recipient and reviewed its relevant literature.

CASE REPORT

A 33-year-old man visited in our dermatology clinic with generalized pruritic skin papules, vesicles, targetoid lesions, urticarial plaques, and erosions from one month ago (Figure 1). He was known case of chronic renal failure due to bladder exstrophy and had undergone renal transplantation 5 years ago, thus he was receiving prednisolone 5 mg/d and cyclosporine 50 mg/BID.

In our clinic, a skin biopsy was taken from the trunk lesions and histologic examination of the biopsy specimen revealed subepidermal blister, whose lumen contained eosinophil (Figure 2). There were numerous eosinophils in the upper dermis around blood vessels (Figure 3). Antibodies against BP180 and BP230 antigens were detected in the patient’s serum. Therefore, the diagnosis of BP was made, and systemic corticosteroid (prednisolone 50 mg /d) was prescribed.

DISCUSSION

The occurrence of BP in renal transplant patients is rare. We summarized clinical characteristics of
previously reported cases in Table. Patients are from different age groups while in some cases renal function was normal initially, most of the patients had chronic rejection with poor renal function. All of the patients had various degrees of response to systemic corticosteroids.

<table>
<thead>
<tr>
<th>Reference, Year</th>
<th>Age (y)</th>
<th>Associated Disease</th>
<th>Rejection</th>
<th>Interval (y)</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freehally et al., 1982</td>
<td>10/F</td>
<td>Chronic Pyelonephritis</td>
<td>Chronic (Poor Renal Function with H/D)</td>
<td>2</td>
<td>Corticosteroid , Graft Nephrectomy</td>
</tr>
<tr>
<td>Yamazaki et al., 1998</td>
<td>9/M</td>
<td>Crescentic Glomerulonephritis</td>
<td>Chronic (Poor Renal Function with P/D)</td>
<td>5</td>
<td>Corticosteroid , Graft Atrophy</td>
</tr>
<tr>
<td>Morelli and Weston, 1999</td>
<td>15/F</td>
<td>Hereditary Cystinosis</td>
<td>Chronic (Poor Renal Function with H/D)</td>
<td>3 (7 mo)</td>
<td>Oral Methylprednisolone 12 mg/d, Graft Nephrectomy</td>
</tr>
<tr>
<td>Tessari et al., 2002</td>
<td>47/F</td>
<td>Mesangial Glomerulonephritis</td>
<td>Chronic (Poor Renal Function with H/D)</td>
<td>15</td>
<td>Corticosteroid, Plasmapheresis</td>
</tr>
<tr>
<td>Yang et al., 2009</td>
<td>52/M</td>
<td>Chinese Herbal Nephropathy Hepatitis B and C</td>
<td>Chronic (Normal Initially with Gradual Deterioration Acute)</td>
<td>13</td>
<td>Corticosteroid, Plasmapheresis</td>
</tr>
<tr>
<td>Sofi, Aijaz A et al., 2010</td>
<td>46/M</td>
<td>Diabetes Mellitus Blood Hypertension, HCV</td>
<td>Chronic</td>
<td>8</td>
<td>High Dose of Steroid, Mycophenolate Mofetil</td>
</tr>
<tr>
<td>Clara Rodriguez-Caruncho et al., 2011</td>
<td>39/M</td>
<td>Schistosomiasis</td>
<td>Chronic</td>
<td>3</td>
<td>Corticosteroid, Graft Nephrectomy</td>
</tr>
<tr>
<td>Suzanne devaux et al., 2011</td>
<td>50/M</td>
<td>Uraemic Hemolytic Syndrome</td>
<td>Chronic</td>
<td>6</td>
<td>Dapsone , Corticosteroid, Graft Nephrectomy</td>
</tr>
<tr>
<td>Juliano peruzzo et al., 2013</td>
<td>28/F</td>
<td>Mesangial Glomerulonephritis</td>
<td>—</td>
<td>10</td>
<td>Azathioprine, Prednisolone</td>
</tr>
<tr>
<td>L. Alzor et al., 2014</td>
<td>35/F</td>
<td>MTOR-inhibitors</td>
<td>—</td>
<td>6 mo</td>
<td>Corticosteroid , Decrease Dose of Everolimus</td>
</tr>
<tr>
<td>L. Alzor et al., 2014</td>
<td>65/M</td>
<td>MTOR-inhibitors</td>
<td>Acute</td>
<td>10</td>
<td>Corticosteroid , Cessation of Sirolimus</td>
</tr>
<tr>
<td>Abhilash Koratala et al., 2018</td>
<td>63/M</td>
<td>Membranous Nephropathy</td>
<td>Acute</td>
<td>5</td>
<td>Corticosteroid</td>
</tr>
</tbody>
</table>

Various aetiologies has been described for this condition such as immunological activity within the graft (some studies hypothesized immune cross-reactivity between the skin and donated kidney, drug-association (M-TOR inhibitors), autoimmunity induced by viral infections (HCV and HBV). Occurrence of BP also has been reported in association with an acute kidney injury. In our patient, renal function was normal and remained so after six-month follow up, no suspicious drug was found and there was no acute or chronic viral infection. The skin lesions’ response to systemic corticosteroids...
corticosteroid was excellent and the drug was tapered over time.

CONCLUSION

There was no finding that suggests the patient’s disease was caused by graft rejection, drug or viral infection. Therefore, BP maybe an accidental finding in this patient.

REFERENCES


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