Our experience in clinical use of new antifibrinolytic substance, AMCHA,** on several skin diseases has been reported already(1). We tried to prove the effectiveness of AMCHA again and intended to show the relation between plasmin activity in the blood and the effect of administration of AMCHA.

GENERAL METHOD OF CLINICAL EXAMINATION

1) The clinical status of patients was carefully observed and recorded according to clinical routine in every consultation.

2) Aqueous solution of AMCHA was injected to patients every day as a rule. To infant patients 2 to 5 ml of 5% AMCHA solution was injected subcutaneously or intravenously, and to the other patients 5 ml of the solution intravenously.

3) Relating to the clinical examination, plasmin activity in the blood was also examined by routine methods. The acceleration of whole clot lysis and euglobulin lysis and the decrease of the content of plasma fibrinogen were measured. Appropriate and necessary controls were taken to examine the effect of AMCHA.

RESULTS

Three cases of acute dermatitis, two cases of autosensitization dermatitis and one case of mucocutaneous ocular syndrome were selected for our investigation.

In reproducing the degree of subjective or objective signs, the following symbols were used.

+++ .......... Very strong
++ ............ Moderately strong
+ ............. Clearly present but weak
± ............. Very slight

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** 4-(aminomethyl)cyclohexane-1-carboxylic acid.
**Case 1.** 26-year-old male

1) Diagnosis: Mucocutaneous ocular syndrome (on eyes, mouth and extremities).

2) Anamnesis: For 8 years the patient was suffered from recurrent stomatitis.

3) Case history: Two weeks prior to examination the lesion appeared on above mentioned area. Patient was seen at O.P.D. on May 4, 1962, and admitted on May 8.

4) Status at the first examination: Chill (+), stomatitis (++), aphthae (++), conjunctivitis (+), red spots (++). Acute inflammation was apparently observed. Blood examination was carried out on May 10. The result showed hypofibrinogenemia and the acceleration of euglobulin lysis, indicating high plasmin activity. Routine laboratory examination; R.B.C. 4,510,000, W.B.C. 5,300, platelets (direct method) 162,000, urinalysis all within normal limit, STS negative, blood pressure 110/70.

5) Course and effect of treatment with AMCHA: Since May 12, 5 ml of 5% AMCHA solution was injected intravenously once a day for four days. After the second injection, the changes were much improved; after the fourth injection, the lesion almost healed up. Blood examination at this time indicated normal plasmin activity.

6) Side effect: None.

7) External application: None.

8) Result: It is recognized that the sole administration of AMCHA was enough effective in treating mucocutaneous ocular syndrome and lowering the plasmin activity of the venous blood of the patient.

**Case 2.** 52-year-old male

1) Diagnosis: Autosensitization dermatitis (on the whole body).

2) Anamnesis: No significant anamnesis related to diagnosis.

3) Case history: Since about six months patient developed several eczematous lesion of legs, and ten days prior to examination generalized eruption appeared all over the body. Patient was seen at O.P.D. on April 14, 1962, and admitted on May 22.

4) Status at the first examination: Itching (+++), papules (+), vesicles (+), pustules (+), crusts (+), exudation (++). Blood examination was carried out on May 22. The result showed the acceleration of whole clot lysis and of euglobulin lysis, indicating high plasmin activity.

Routine laboratory examination; R.B.C. 4,560,000, W.B.C. 7,600, platelets (direct method) 128,000, urinalysis all within normal limit, STS negative, blood
5) Course and effect of treatment with AMCHA: Since May 22, 5 ml of 5% AMCHA solution was injected intravenously for seven days. After the second injection, itching and exudation began to decrease; after the seventh injection the lesion almost healed up, and scaling was observed. Blood examination was carried out at this time, and slightly accelerated euglobulin lysis was noticed.

AMCHA administration was interrupted for five days, and the recurrence of exudative lesion was seen on legs.

6) Side effect: None, and no remarkable change of laboratory data was also seen after AMCHA administration.

7) External application: Boric acid and zinc ointment.

8) Result: It is recognized that the administration of AMCHA was effective in treating autosensitization dermatitis, and plasmin activity became lower than before AMCHA treatment.

Others: Three cases of acute dermatitis with high plasmin activity and one case of autosensitization dermatitis, showed also high plasmin activity, have been treated with same method. In these cases the administration of AMCHA was conspicuously effective, and the plasmin activity showed normal after treatment (Table 1).

<table>
<thead>
<tr>
<th>No.</th>
<th>Keio Card No.</th>
<th>Diagnosis</th>
<th>Status of the first examination</th>
<th>Plasmin activity</th>
<th>Administration of 5% AMCHA solution</th>
<th>Other drugs</th>
<th>Results</th>
<th>Side effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Age 24</td>
<td>Acute dermatitis</td>
<td>causalgia itching</td>
<td>(+ +)</td>
<td>Higher</td>
<td>5 ml × 6</td>
<td>Boric acid and zinc ointment</td>
<td>Effective</td>
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<tr>
<td></td>
<td>Male</td>
<td></td>
<td>redness blisters</td>
<td>(+ +)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td>Age 52</td>
<td>Acute dermatitis</td>
<td>causalgia exudation swelling</td>
<td>(+ +)</td>
<td>Higher</td>
<td>5 ml × 3</td>
<td>Boric acid and zinc ointment</td>
<td>Extremely effective. All signs completely disappeared.</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td></td>
<td>redness</td>
<td>(+ +)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>3</td>
<td>Age 42</td>
<td>Acute dermatitis</td>
<td>itching</td>
<td>(+ +)</td>
<td>Higher</td>
<td>5 ml × 5</td>
<td>Boric acid and zinc ointment</td>
<td>Conspicuously effective. All signs were improved.</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td></td>
<td>redness blisters</td>
<td>(+ +)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Age 48</td>
<td>Autosensitization</td>
<td>itching exudation papules blisters</td>
<td>(+ +)</td>
<td>Higher</td>
<td>5 ml × 11</td>
<td>Boric acid and zinc ointment</td>
<td>Effective</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>dermatitis</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Table 1.

CONCLUSION

Three cases of acute dermatitis, two cases of autosensitization dermatitis and one case of mucocutaneous ocular syndrome were treated with 5% AMCHA.
solution. The blood examination, performed before AMCHA treatment, revealed high plasmin activity in all of these cases.

The results of our investigation showed that the administration of 5% AMCHA solution was effective for treating all these cases, and that plasmin activity in blood became lower than before the administration.

No unfavorable side effect was observed.

REFERENCES