# WEBER-CHRISTIAN SYNDROME IN A CHILD\*

By

GURMOHAN SINGH, M. D., (Derm. & Ven.)

P. K. SRIVASTAVA, M.D., D. C. H.

K. N. GOUR, M. D., F. R. C. P. E., F. R. C. P., (Glasg.), D. C. H., D. P. H.

Flemmings was the first to describe this condition in 1872. Another case was reported by Pfeiffer in 1892. Weber in 1925 described it under the name of "Relapsing, Non-Suppurative nodular Panniculitis." Christian in 1928 described the disease and added the word febrile to "Relapsing, Non-Supurative nodular Panniculitis."

The disease is infrequent at any age and rare in children (Wright, 1954).

## CASE REPORT

Eistory:—A boy aged  $I_4^3$  years was brought to the S. S. Hospital, Banaras Hindu University, with the complaints of fever and pain all over body of 6 days duration. He was tender on touching and lifting. The fever was high in the afternoon but less at night. After two days of start of this trouble the parents noticed a small painful nodular sweiling on the front of the right thigh. After another two days such nodules were noticed all over the body. He was given 4x0.2 million units of procaine penicillin. Fever slightly diminished but the nodules did not undergo any change. During this period the child had been refusing to the anything except a few sips of water and milk. He was not standing perhaps because of painful nodules. There were no other complaints such as nasal or ear discharge, diarrhoea or vomiting. No relevant past history.

Family History: Nothing significant.

On Examination:—Child was of an average built, height 29", weight 18 lbs., B. P. 105/75 mm. of mercury. Patient was running temperature of 101°F at the time of admission and was very irritable. Fifteen nodules could be palpated, varying in size from half a pea to the size of a cherry. The nodules were firm and very tender. These were not adherent to underlying structures. The overlying skin was more hot than rest of body skin and showed slightly violet tinge. The nodules were not symmetrical and were distributed as follows:

Abdomen	• • •	•••	•••	3
Back	•••	•••		2
Dorsum of left foot	•••	•••	•••	1
Legs	***		•••	4
Thighs	•••	•••	•••	3
Left fore-arm	•••	•••	•••	1
Nape of neck	•••	•••	•••	1
NI III				

No other system of body was involved.

<sup>\*</sup> From the Department of Medicine, College of Medical Sciences, Banaras Hindu University Varanasi-5.

Received for publication on 20-11-34.

Progress: Temperature was 101°F in the morning and 100°F in the night on the first and second day. During his stay in the hospital, he was given injections of Procaine Penicillin 4 lac units and streptomycin half gram daily. Temperature came down to 98–99°F on third of hospitalization. The nodules also started subsiding and completely disappeared on the 12th day leaving behind pigmented skin at the site of the nodules. The overlying skin was slightly atrophic.

Investigations:—On admission total W. B. C. 4,500/cu. m. m., neut. 56%, lymph. 44%, E. S. R. 42 m. m. first hour westergren Hb. 9.56%, Urine normal. Twelve days later W. B. C. count was 6,500/cc. m. m.

 $Histopathology\ of\ Nodule\ (Fig.\ 1):$  Revealed normal epidermis and dermis. The subcutaneous fat showed focal collection of inflammatory cells replacing the



Fig. 1

fat showed focal collection of inflammatory cells replacing the fat spaces and composed of dense polynuclear infiltrate admixed with histiocytes and lymphocytes in the centre with proliferated fibroblasts and histiocytic cells surrounding it. The proliferated histiocytes tend to form giant cells.

#### DISCUSSION

Though it was the first attack, yet it was typical enough to be diagnosed, the painful, tender, non suppurating nodules, with a generalisen distribution which healed leaving slightly atrophic pigmented spots and the associated fever supported by histopathology confirmed the diagnosis.

The case is interesting because of the rarity of this disease in younger children. Birrell (1953) blames leprosy as the causative factor. Though the area from which the case belongs is an area of moderate endemicity, yet no evidence of leprosy was seen in close contacts. In our case the nasal smear examination and smear from the lobule did not show Hansen's Bacilli and there was no clinical evidence of leprosy. Hence leprosy could not be accused in this particular case.

Increase of leucocyte count with the regression of lesions from low initial count shows that relative leucopaenia was an important associated feature of the Weber Christian Syndrome. This was reported also by Sanford et al (1952).

Internal organs have been reported to be involved by Friedman (1945) and Hutt and Pinniger (1956) in their cases. Our case, however, did not show any clinical manifestation of its involvement of internal organs.

Cresobie (1955) has treated a case of this disease with Cortisone and A. C. T. H. Sadana et al (1965) have treated their case with Penicillin, Streptomycin and Prednisolone. Our case showed improvement with penicillin and Streptomycin alone. Improvement seen with cortisone and A. C. T. H. or penicillin and streptomycin alone or in combination cannot be attributed with certainly to these drugs as it is a disease where relapses and remmissions are common.

#### SUMMARY

A case of febrile, non suppurative nodular panniculitis (Weber Christian Syndrome) in a young child of  $1\frac{5}{4}$  years is described.

## **ACKNOWLEDGEMENT**

We are thankful to Prof. K. N. Udupa, M.S., F. R. C.S., Superintendent, of the hospital for permitting us to publish the case and our thanks are also due to Prof. I. M. Gupta, Professor of Pathology for his help in doing the histopathology.

### REFERENCES

Birrel, J. H. N. (1953) M. J. Australia 2, 7. ١.

Christian, H. A. (1928) Arch. Int. Med. 42, 338. Cresobia, S. (1955) Ann. Int. Med. 43, 622. 2.

3.

Flemmings, W. (1872) Arch. Path. Anat. 56, 146. 4.

Friedman, N. B. (1956) J. Clin. Path. 9, 316. 5.

Hutt, M. S. R. and Pinniger, J. L. (1956) J. Clin Fath. 9, 316. 6.

Pfeiffer, W. (1892) Deutsches Arch. Klin Med 50, 438. 7.

- Sadana, S. R., Khanna, S. D. and Chopra, H. L. (1963) Ind. Jour. Med. 8. Sc. 17, 565.
- Sanford, H. N., Eubank, D. F. and Stenn, F. (1952) Am. J. Dis. Child 83, 156. 9.

Weber, F. P. (1925) Brit. J. Dermat. 37, 301. 10.

Wright, C. S. "Text Book of Paediatrics" Edited by Nelson, W. E. 11. Page 1369, W. B. Saunders & Co. 1954.