GRANULOCYTOPENIA ASSOCIATED WITH GLANDULAR FEVER

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An unusual cause of granulocytopenia is described in a patient whose glandular fever was first diagnosed on sternal marrow biopsy.

Case History

A Gurkha rifleman aged 25 years was admitted to the British Military Hospital, Kamunting, Malaya, with a history of retro-orbital headache, muscle pains and nausea for several days. He had not been on jungle patrols for two years, and had taken no drugs recently.

On physical examination, the relevant findings were a temperature of 104°F, and a generalised lymphadenopathy, the glands being discrete and tender. There was neither rash nor enlargement of spleen or liver. Blood count on admission showed a haemoglobin of 11.8 g. per cent and a white cell count of 3,400 per cu. mm. with 52 per cent polymorphs, 44 per cent lymphocytes and 4 per cent monocytes; no abnormal cells were seen. The following day the white cell count dropped to 1,500 per cu. mm. with only 33 per cent of granulocytes (absolute level of 500 cells per cu. mm.).

Antibiotic cover with terramycin was started and a sternal marrow biopsy performed the next day. The marrow specimen was moderately cellular, the erythroid series being quite normal. Active myeloid tissue was present, in spite of the low peripheral count. The principal feature was the presence of many abnormal mononuclear cells with basophilic-rimmed cytoplasm containing vacuoles and latticed nuclear chromatin. These cells were considered to make a diagnosis of glandular fever probable.

Later, on the day of sternal puncture, the white cell count had risen to 2,100 with 50 per cent granulocytes. The following day the count was the same and a few abnormal mononuclear cells were seen for the first time in the peripheral blood. From this time the patient improved rapidly, all symptoms subsiding and the lymphadenopathy decreasing over a period of three weeks, atypical cells persisting for about the same time.

The leucocyte count rose steadily, being 6,200 per cu. mm. (60 per cent granulocytes) a month after admission, when the patient was discharged in good health.
Comment

Marked leucopenia is an uncommon feature of glandular fever. In only 7 out of 64 cases of Bernstein’s (1940) detailed series was the leucocyte count below 4,000 per cu. mm. The lowest count found in the literature is one of 1,500 per cu. mm. reported by Davidsohn (1937).

The granulocyte depression was very transient in the case reported here, the marrow appearances eighteen hours after the lowest peripheral count showing active myeloid regeneration, being followed by a steady rise to normal.

REFERENCES


UNITED KINGDOM ARMY MEDICAL SERVICES
ANNUAL EXERCISE

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SUMMARY

The Royal Army Medical Services hold an annual Director-General’s exercise which features the latest opinions and doctrine regarding the role of medical troops in modern warfare. The 1959 operation, held 1 to 4 October, was named Exercise Medical “Canaletto” for a Venetian painter of the eighteenth century. He has been called the “Master of Perspective,” and it was the aim of this exercise to place medical problems arising from nuclear warfare “in proper perspective.” The first day’s programme consisted of a series of lectures at the Royal Army Medical College, Millbank, London. The next two and a half days consisted of tactical problems, discussions, and demonstrations at the Field Training Centre, Royal Army Medical Corps, Keogh Barracks, Ash Vale, Surrey. This phase was classified “Restricted” (U.S. “Confidential”).

LECTURES (LONDON)

Attendance at Millbank was restricted to some ninety senior officers of the Royal Army Medical Corps, including the Senior Medical Officers of major commands in the United Kingdom and abroad; several prominent civilian consultants to the Army; the Directors-General, or their deputies, of several other countries, including Denmark, France, the Netherlands, Norway, Turkey, the United States, West Germany, and Yugoslavia; and certain foreign medical liaison officers based in London. The programme consisted of the following major topics: (1) Initial treatment of burns; (2) Nuclear radiation; (3) Isolation and the will to live; (4) Anaesthetics; (5) Surgery of trauma; (6) Arterial grafts.