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The Course of Typhoid Fever in a Woman Treated in the Clinic of Infectious Diseases, Medical Academy in Lublin

Przebieg duru brzuszego u pacjentki leczonej w Klinice Chorób Zakaźnych Akademii Medycznej w Lublinie

After World War II, a steady decrease of the number of patients with typhoid fever has been recorded. For example, in Poland in 1945, 1987 and 1988, there were recorded 81,657, 11 and 28 patients respectively (1). The disease of most of them was sporadic or familial. The last big epidemic occurred in Kraśnik Fabryczny in 1969, in which 265 persons were affected (2). Then single cases of this disease occurred in Lublin in 1974, 1975, 1976, 1984, 1988 and the last case in the Lublin district was diagnosed in 1988. The present actual number of *Salmonella typhi* carriers in the Lublin district is 34, including 7 from the city of Lublin.

HISTORY OF THE CASE

The female patient S.A. (registration No. 772/90), a retiree, 48 years of age, a Lublin resident was admitted to the Clinic of Infectious Diseases in Lublin on December 4, 1990. She was initially diagnosed with fever and suspected salmonellosis. The first disease symptoms occurred on Nov. 19, 1990 during her stay in a sanatorium at Świnoujście and were manifested by flatulence, fullness in the epigastrium and cructation. After 3 days there appeared diarrhea — several loose stools during the day, vomiting and body temperature increase up to 39°C. The patient was isolated, treated with Gentamycine and received antifebrile drugs. On Nov. 28 the patient was brought to Lublin. Initially she was cared for by a Consulting Unit of Internal Diseases, where administration of Gentamycine was continued and antidiarrhoics were used. On Dec. 5, i.e. on the 15th day of the illness, the patient was sent to the Clinic because of aggravation of her health state and temperature increase to 40°C.

Anamnesis: in 1978 she was operated on the mitral valve because of stenosis, in 1983 hospitalized in the Cardiology Clinic, Medical Academy in Lublin; endocarditis lenta was suspected which was excluded on clinical observations and the patient was discharged with diagnosed paricarditis sicca.

Epidemiological inquiry: good living conditions, the flat provided with sewer system; she had no vaccination over more than the last decade. Short lasting dispeptic symptoms were observed during her stay in the sanatorium, but in five other persons they slightly intensified.

CLINICAL EXAMINATIONS

When admitted to the Clinic of Infectious Diseases, the patient was apathetic, confused and her general condition was grave. The body temperature was 39.9°C, the skin was pale, covered with perspiration, and on her face bilateral erythema — "mitral butterfly" appeared. Her mouth mucosa was getting dry, the tongue coated with a brown fur, marked cyanosis of the lips. Single whizings and sibilant rales were heard on auscultating her lungs. Heart action was rhythmic, about 100/min. Heart tones were weak, the systolic-diastolic murmur was most distinct at the apex and Erb's point. RR — 120/70. The abdomen cavity cases were arched slightly above the thorax level with marked tympania. The liver was tender, palpable about 1 cm below the right rib arch in the medial-clavicle line, the spleen not enlarged. Goldflam's symptom bilaterally negative. Meningeal symptoms were negative. Basic laboratory examinations were made. Blood morphology: Hb — 13.6 g%, E — 4,400,000, L — 6,300, Ht — 42%. In leukocytic smear: p — 8%, s — 38%, lf — 42%, m — 2%. Blood count — 40/70. Urine analysis: protein — 0.76‰, leukocytes — to 10, single erythrocytes and fine-grained casts. Activity of transaminases: AspAt — 170 uRF, AlAt — 100 uRF. Chest X-ray: not numerous macular inflammatory inspissations on the left of the cardiac cavity, the heart a little enlarged in the left dimension.

The anamnesis, the patient's state and the results of the laboratory examinations suggested septicemia, not excluding *Salmonella* infection and the possibility of endocarditis or myocarditis in the disease course. The initial treatment comprised Colistin given intra-muscularly at a dose of 6 mln u.m./day, infusion drips of PWE, 0.9% NaCl, 5% of glucose, enemas of 0.9% NaCl, Digoxin, Cocarboxylase, Lactid. From the second day of hospitalization everyday bacteriological examination of the stool for S.S. was introduced and blood was taken for culture. On the third day of treatment in the Clinic, i.e. the 18th day of illness, single exanths resembling typhoid roseola appeared on lateral skin of the chest and on the abdomen. Fever persisted from 39—40.5°C.

Typhoid fever was suspected more and more and Chlorocid, Metronidazol, Gamma-Venin (2 ×) were administered before obtaining bacteriological and serological confirmation. After about 30 hrs from Chlorocid administration, critical drop of body temperature to 36.2°C occurred. Measurements of arterial blood pressure were 80/60 to 100/60 that time. After one day the temperature increased to 39°C again, persisting for 3 days and then was dropping lytically over 5 days (Fig. 1).

Bacteriological confirmation of typhoid fever was obtained from blood cultures from 6—10 Dec., i.e. till the 21st day of illness. From the stool of Dec. 5 *Salmonella typhi* was cultivated only once, i.e. before the beginning of proper treatment (16th day of illness). Widal's reaction (7 Dec.): with antigen "0"

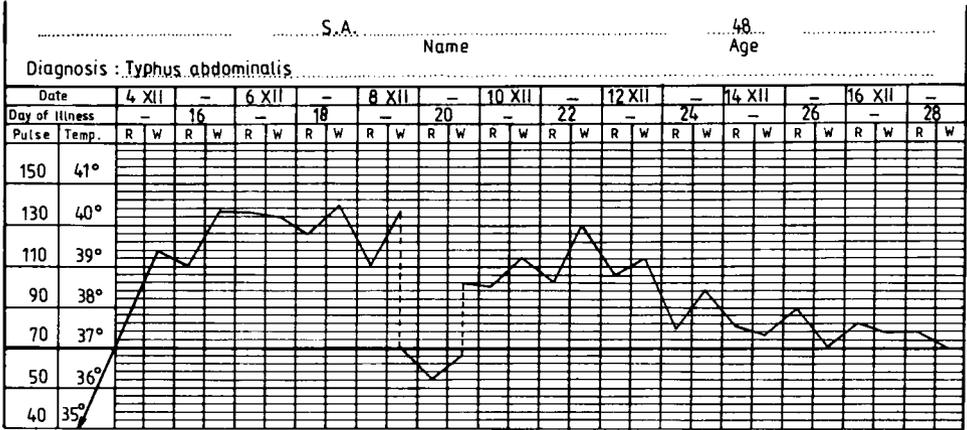


Fig. 1. Diagram of body temperature during two weeks of hospitalization

was 1:200, "H" — 1:800, the titer in the reaction of passive hemagglutination with antigen "Vi" was 1:80, "O" increased to 1:400, with antigen "H" it remained at the same level, whereas the titer with antigen "Vi" did not change in the reaction of passive hemagglutination, but with antigen "O" it decreased to 1:01240. On Jan. 3, 1991 Widal's reaction with antigen "O" was 1:200, "H" — 1:400. In the patient's blood morphology, it was found: Hb — 11g%, E — 3570000, l — 9000, the leukocytic system smear showed: s — 24%, k — 4%, lf — 72%, blood count — 23/50. Normalization of transaminases activity and remission of the radiological changes of lungs described earlier were obtained. The patient in good general condition was discharged from the Clinic on Jan.1, 1991, after 3 weeks since the fever had decreased.

An epidemiological analysis carried out by the local Sanitary-Epidemiological Station in Lublin and Świnoujście was not a warrant for finding the infection source.

DISCUSSION

Despite the stabilized epidemiological situation, registration of *Salmonella typhi* carriers, cases of typhoid fever are recorded every year. Rare occurrence, polymorphism of symptoms, untypical clinical picture often determined by an antibiotic therapy applied earlier in patients with fever cause the diagnosis of typhoid fever in its initial phase is not easy. In the patient described, additional diagnostic difficulties resulting from the existing defect of the mitral valve predisposing to endocarditis. In the course of typhoid fever myocarditis may also occur by the end of the second week of illness (4).

Attention should be called by the critical decrease of body temperature 30 hrs after administration of Chlorocid, which lasted about one day. This symptom was not the consequence of complications such as alimentary tract hemorrhage or perforation of the intestines. During the epidemic in Kraśnik Fabryczny dramatic temperature decrease was observed in some patients after a dozen or so hours of treatment with Detreomycin, which, however, did not reach the initial values in the following days (3).

The above description shows that isolated typhoid cases are always possible to occur, which is rarely taken into consideration, and they can be a source of epidemic. It is still an actual and highly significant problem compelling the medical services to unceasing epidemiological alert.

REFERENCES

1. Kostrzewski J., Piątkowski J.: Choroby zakaźne w Polsce w 1988 r. *Przegl. Epid.* **44** (1—2), 20, 1990.
2. Mardarowicz Cz. et al.: Epidemia duru brzuszego w Kraśniku Fabrycznym. I. Analiza epidemiologiczna. *Przegl. Epid.* **27** (3), 339, 1973.
3. Mardarowicz Cz. et al.: Epidemia duru brzuszego w Kraśniku Fabrycznym. II. Analiza kliniczna. *Przegl. Epid.* **27** (3), 345, 1973.
4. Mierzejewska I. et al.: Zespół Wolffa, Parkinsona i White'a w przebiegu zapalenia mięśnia serca u chorej na dur brzuszny o nietypowym obrazie klinicznym. *Wiad. Lek.* **30** (11), 863, 1977.

Otrzymano 1992.11.05.

STRESZCZENIE

Opisano przebieg duru brzuszego u 48-letniej pacjentki, która w r. 1978 była operowana z powodu stenozы zastawki mitralnej. Trudności diagnostyczne wynikały z wcześniej zastosowanej antybiotykoterapii oraz możliwości powikłań związanych ze współistniejącą wadą serca.