ACUTE PARASITIC INFECTIONS AS A CAUSE OF FEVER OF
UNKNOWN ORIGIN IN EGYPT

By

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ACUTE PARASITIC INFECTIONS AS A CAUSE OF FEVER OF UNKNOWN ORIGIN IN EGYPT

U.S. Naval Medical Research Unit No. 3, Cairo, Egypt and *Abbassia Fever Hospital, Cairo, Egypt.

During 1992, 141 patients were referred to the Abbassia Fever Hospital (AFH) for investigation of fever undiagnosed for over 3 weeks. Of these 141 patients, 76 were females and 65 were males; their ages ranged from 5 years to 62 years.

Of the 141 patients investigated, 80 were diagnosed to have an infection, 28 a collagen vascular disease and 20 a neoplasm (Table). As in previous reports, infection was the most common cause of fever of unknown origin (FUO) (Petersdorf and Beeson, 1961) and tuberculosis was the most common infection causing FUO (Hassan and Farid, 1974; Farid et al., 1990a; Farid et al., 1993). Of the 80 patients with an infection, 32 were caused by tuberculosis and of these 32 patients, 14 had abdominal tuberculosis confirmed by ultrasonography (Hibbs et al., 1994). Acute parasitic infection with eosinophilia was the next most common cause of prolonged fever among infected patients in this series and included 10 with acute fascioliasis, 9 with schistosomiasis and 1 with ascariasis. Other parasitic infections included 1 toxoplasmosis and 1 malaria.

Non-invasive radiological techniques, including ultrasonography, echocardiography and computerized tomography, were of great importance in diagnosing these patients. The use of new immunoserological techniques, including the Counterimmunoelectrophoresis (CIEP) and Enzyme-linked immunosorbent assay (ELISA) (Mansour et al., 1983; Boctor et al., 1985 and Shaheen et al., 1989) were particularly useful in diagnosing acute febrile patients with eosinophilia, including 10 patients with acute Fasciola hepatica infection, 9 patients with acute Schistosoma mansoni infection and 1 patient with Ascaris lumbricoides infection. Clinically, acute Fasciola and acute Schistosoma infection present a similar clinical picture essentially of prolonged fever accompanied by tender hepatomegaly, eosinophilia and mild anaemia. Ultrasonography is useful in demonstrating abnormalities caused by the Fasciola worm in the liver, gall bladder and biliary system (Bassily et al., 1989). Diagnosing these patients promptly is important since treatment is specific and relatively easy. The acute phase of the infection is controlled by low dose prednisone for 2-3 days before starting specific therapy. Acute schistosomiasis is treated with a single dose of praziquantel 75 mg/kg divided into 3 equal parts given in one day (Farid et al., 1986; Farid et al., 1987 and Farid et al., 1989). Acute fascioliasis is treated with bithionol,
Table: Diagnostic categories of fever of undetermined origin based on a study of 141 patients admitted to the Abbassia Fever Hospital, Cairo, January-December 1992.

<table>
<thead>
<tr>
<th>Category</th>
<th>No.</th>
<th>%</th>
<th>Final diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infections</td>
<td>80</td>
<td>57</td>
<td>Tuberculosis (32), Salmonellosis (10), Fascioliasis (10), Schistosomiasis (9), Infective Endocarditis (5), Brucellosis (4), Pylonephritis (2), Dental Abscess (1), Tubo-ovarian Abscess (1), Leprosy (1), Osteomyelitis (1), Toxoplasmosis (1), Falciparum Malaria (1), HIV (1), Ascariasis (1)</td>
</tr>
<tr>
<td>Collagen-vascular diseases</td>
<td>28</td>
<td>20</td>
<td>Systemic Lupus Erythematosus (13), Rheumatoid Arthritis (6), Still’s Disease (5), Rheumatic Fever (1), Polyarteritis Nodosa (1), Polymyositis (1), Dermatomyositis (1)</td>
</tr>
<tr>
<td>Neoplasms</td>
<td>20</td>
<td>14</td>
<td>Lymphoma (10), Hodgkin’s Disease (6), Neuroblastoma (3), Acute Leukemia (1)</td>
</tr>
<tr>
<td>Other Causes</td>
<td>13</td>
<td>9</td>
<td>Sarcoidosis (3), Idiopathic Granulomatous Hepatitis (1), Neutrophilic Dermatosis (1), Drug Fever (2), Periodic Disease (1), Undiagnosed (5)</td>
</tr>
</tbody>
</table>

50 mg/kg daily for 10 days (Farid et al., 1988 and Farid et al. 1990b).

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