

CUTANEOUS PHASE OF HOOKWORM DISEASE IN A GRODNO RESIDENT AFTER TRAVEL TO AN ENDEMIC REGION (CLINICAL CASE)

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Relevance. Ancylostomiasis is a hookworm based infectious disease caused by the parasitic agents *Ancylostoma Duodenale*, *Necator Americanus*, or *Ancylostoma Ceylanicum*, that can reside for several years in the small intestine once infected. Globally about 500 million people have hookworm infections, predominantly noted in developing countries. The agent *Ancylostoma duodenale* is particularly endemic to moist, warm climatic regions and concentratedly recorded in Middle East, North Africa, China and northern India [1, 2].

The eggs molts to become the slender infective filariform and waits until it comes in direct contact with human skin and the infection is initiated after penetration via skin. This is due to the production of Hyaluronidase enzyme by the larvae, which weakens dermal integrity allowing it to migrate through the skin. The larvae passively then reach the lungs via blood vessels from the right side of the heart and penetrates into the alveoli, moves up the bronchial tree to the pharynx, and gets swallowed. The worms mature into sexually differentiated adult forms in 4-6 weeks. The parasites can thrive in the host for several years as it continues to develop multiple survival strategies leading to chronic form [1, 2].

Target. Presentation of a clinical case of cutaneous phase of hookworm in a Grodno resident after travel to an endemic region.

Research methods. Clinical case.

Results and their discussion. A 40-year-old man, a resident of Grodno, presented to the emergency room of the infectious diseases hospital complaining of a profuse, serpiginous, snake-like rash and severe itching on his left thigh, extending to his buttock. Amnesia revealed that the man had returned several days earlier from the Maldives, where he had been vacationing with his family. He reported that while relaxing on the beach, he dug a hole and covered it with sand, bringing his body into close contact with deep layers of moist soil, likely containing hookworm larvae. A complete blood count revealed no abnormalities. A stool analysis revealed no helminth eggs. Based on the clinical presentation and epidemiological data, a diagnosis of hookworm disease, cutaneous phase, was made. The patient was prescribed treatment with Albendose 400 mg twice daily for 14 days, which led to gradual resolution of the rash and complete recovery.

Conclusions. This is a case of early-stage hookworm disease, characterized by "ground itch." A thorough epidemiological history, particularly exposure to tropical regions, allows for a precise diagnosis of tropical helminthiasis and prompt initiation of anthelmintic therapy, which prevented the disease from becoming chronic.

LITERATURE

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STUDY OF CLINICAL AND ANGIOGRAPHIC FEATURES OF YOUNG PATIENTS WITH MYOCARDIAL INFARCTION

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Relevance. There is a significant increase of myocardial infarction (MI) in young individuals [1]. It's a health burden but also a financial and psychological burden. One study shows that presentation of cardiopulmonary arrest is higher in young patients (pts) who had MI and it is associated with significant in-hospital mortality [2].

Target. To identify clinical, anamnestic, laboratory and angiographic features of young (≤ 45 years old) pts with MI.

Research methods. 81 pts who were admitted to the Grodno Regional Clinical Cardiological Center from January 2024 to November 2025 with acute MI were divided by WHO «young» criteria: Group 1; pts ≤ 45 years ($n=34$), Group 2; pts >45 ($n=47$).

MI was diagnosed with anamnesis, clinical signs, ECG findings, cardiac biomarker values. All underwent coronary angiography with a possibility of percutaneous coronary intervention (PCI) via Judkins technique in a cath lab using Philips Azurion 7 angiographic unit which was used for the quantitative assessment of stenoses. Statistical analysis was performed using the Statistica 12.0 software.

Results and their discussion. Both groups show male predominance (88% vs. 81%, $p>0.05$). Smoking was the leading modifiable risk factor (68% vs. 72%, $p>0.05$) alongside with obesity. Class 2 and 3 obesity was significantly lower in group 1 (6% vs. 19%, $p=0.045$). Hypertension was prevalent in both groups. Young patients had fewer comorbidities (including diabetes mellitus and atrial fibrillation).

On admission ECG showed Group 1 more often had STEMI pattern (88% of total) while Group 2 showed NSTEMI (26% vs. 12%, $p=0.035$). Lateral wall MI incidence was significantly lower in the young (9% vs. 27%, $p=0.05$). Post infarction complications didn't differ significantly.

Laboratory parameters in group 1 had notably higher WBC counts (suggesting an underlying inflammatory response) while ESR was higher in group 2 ($p<0.05$). Troponin levels were higher in the young, showing a greater myocardial injury ($p<0.05$).