THE ROCKEFELLER FOUNDATION’S ANTI-TYPHUS PROJECT IN SPAIN: LESSONS LEARNED AND FIRST STEPS

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Abstract

Among the major diseases of interest to the Rockefeller Foundation in the 1920s and 1930s was typhus. The Foundation anti-typhus focus was sharpened at the end of the 1930s by the expectation of another European war: its public health staff anticipated that enormous numbers of refugees and the repetition of World War I’s trench warfare would lead to typhus epidemics. The Foundation increased its investment in Rickettsia research, decided to test existing anti-typhus vaccines, and studied the insect transmission of typhus.

An outbreak of typhus in Spain right after the Spanish Civil War caught the interest of the Foundation as an opportunity to both study the vaccines and to study the transmission of the disease. The Foundation sent a young researcher there to study the disease and also shipped several guinea pigs to Spain to be infected with the typhus-carrying lice. American newspapers covered the story of the transport of the Guinea pigs via Pan-American’s flights to Lisbon (and delivery to Spain), and their return to the United States to study the strain of typhus that was rampant in Spain.

The work in Spain gave the foundation clear evidence that the existing anti-typhus vaccines were not very effective and provided impetus for the Foundation’s future focus on insecticidal approaches to typhus control. It was an important step toward the Foundation’s collaboration with the United States’ military’s plans for the invasion of North Africa and led directly into the Foundation’s later acceptance of DDT as an effective anti-typhus strategy. Ultimately the Foundation turned its experience with DDT into a global attack on malaria – one of the most important stories in 20th century tropical medicine.