LACHENAL Guillaume, 2014, *Le médicament qui devait sauver l'Afrique. Un scandale pharmaceutique aux colonies* [The drug that was supposed to save Africa. A pharmaceutical scandal in the colonies], Paris, La Découverte, Les empêcheurs de penser en rond, 282 p.

More than half a century after African countries obtained independence from France, colonialism – its mechanisms, operation and effects – continues to be a busy research field. Historians especially have patiently worked to deconstruct the myths validated not only by the colonial political and administrative apparatus but also the world of science. This book – a detailed and documented monograph on a drug called lomidine [in the French colonies and perhaps better known as pentamidine] that became the focus of European imperialist ambitions to rid Africa of sleeping sickness – attacks the latter. The inglorious reality of the situation, recounted and meticulously dissected by Guillaume Lachenal, is that French (and Belgian) colonial doctors not only refused to admit they had not found a cure but also used a method that was both ineffective and dangerous.

The book recounts what is a forgotten history, hidden away in colonialism's dry administrative reports and golden legends. It is not the author's intention to deny that colonial medicine had any successes or made any contributions or, conversely, to analyze the situation from an exaggerated Foucauldian biopolitics perspective wherein science is understood as merely an instrument in the service of the colonizer. He aims instead to find a middle path by recalling that history is neither linear nor unequivocal and that health policies can only be understood and assessed by carefully documenting the context in which they were applied. Indeed the power of Lachenal's book and its great interest lie in his clear portrayal of the "failures of the imperial machine" and above all, how those failures fit into the colonial system as a whole. Lomidine did not fail to cure sleeping sickness despite the colonial system but because of it; the error was not incidental but an effect of colonial medicine itself.

In reading the story of pentamidine, a molecule developed from chemical compounds discovered in Hungary between the wars, studied at the Liverpool School of Tropical Medicine, synthesized for the first time in East London in 1937 and produced in mass quantities at Vitry-sur-Seine from 1947, we follow how colonial medicine developed at the international level, involving what would become major pharmaceutical companies (just getting starting at the time), voluntaristic states concerned about their image on the international stage, and major figures in medicine, concerned about their place in history. As this book makes crystal clear, colonial medicine was a meeting place for personal ambitions and the means to realize them, far from the safeguards and precautions that were standard practice in metropolitan France.

The drug that "was supposed to save Africa" – called lomidine in French – was used to treat Trypanosomiasis or sleeping sickness, a perfect symbol, with its famous tsetse fly, of the suffering of Africa. The battle against the disease was part of colonial propaganda; also of the "race to defeat microbes" that was under

way between the different European states. This explains to a large degree the dogged persistence in trying to get a technique to work that simply did not, or not really; in any case that could not work as its proponents wanted to believe it could. This technique, called chemoprophylaxis, involved turning a drug into a preventive treatment, a chemical compound into a vaccine, a remedy into a public health policy — with no theoretical or clinical understanding of the mechanisms involved. Sick people were treated and whole populations vaccinated to eradicate sleeping sickness. A series of tests conducted by the colonial powers during the war (first the Belgians and English, then the French) seemed to give leave to believe that the immunization campaigns, soon dubbed "lomidinization", would work like a charm.

The large-scale vaccination campaigns – that is, injecting the entire population of a given region (a shot in the buttocks) – were not as glorious as the propaganda painted them. But above all, the painful and in many cases incapacitating side effects, not to mention the occasional serious accidents, planted the seeds of doubt. The accident in Yokadouma, Cameroon, which killed 28 persons and wounded hundreds on 13 November 1954, is described in detail on the basis of information from the administrative reports. Lachnal shows the reactions of the different actors and how this policy action temporarily destabilized the colonial order; also how that order was quick to upright and re-establish itself on the basis of an administrative investigation that rationalized the incident, distributing blame (much on the natives) and approval (primarily for the local administrators writing up the investigation report). What this example shows is that the method's effectiveness was never questioned: if it didn't work that was the natives' fault; they were primitive and uncooperative. Resistance on the part of local populations appeared as both a symptom of the deeper crises shaking the colonial world and a perfect excuse for the colonial administrators' failures. It was in fact evidence of the inherent contradiction of the colonial project and therefore its impossibility.

We now know the real situation. Lomidine has no preventive powers; it can cure patients of sleeping sickness but cannot immunize. The "miraculous" results of the 1940s experiments were due to the complexity of the disease and the difficulties of detecting it: a considerable share of disease carriers were not identified as such by the techniques of the time. People who had the disease but did not know it were therefore not immunized against it by lomidinization but cured, a fact that simultaneously led physicians to believe in its preventive powers and reduced the virus' natural reservoir. In the short run, there were indeed fewer cases of the disease, but no one had been immunized, and in the long term, the vaccination campaign had no effect, or perhaps an adverse one in that it increased resistance to the virus. All in all, an absurdly low level of protection at a high human cost in terms of immediate and later suffering, as well as deaths.

Historians of science, particularly of medicine, must always be careful to steer clear of the teleological approach that would lead to analysing and possibly judging yesterday's technologies and those who used them by the standards of

current knowledge. We readily criticize physicians' ignorance, but weren't they doing the best they could with the means available at the time? In the case of lomidine, a superficial (or complaisant) analysis might lead to this conclusion. But Lachenal uses the comparison judiciously to show how, in this case, the available knowledge was "partial" in both senses of the word. Lomidine was forced on indigenous populations but not on European travellers: "The official instructions, though confidential, were quite clear: lomidine was dangerous and painful for Europeans; for Africans it was compulsory, including for infants, pregnant women and elderly persons (except in case of very poor general health)" (p. 118). The reluctance of the English to use the drug, like the reservations about administering the substance to Europeans, clearly shows that the dangers associated with it had been assessed and were already familiar at the time. But when it came to the natives, those dangers were simply not mentioned.

In the end what counts here is less what physicians and colonial administrators did in the colonies than the way they did it. The point here is not only the limitations and failures of modern science but the fact that all science is part of a social context and fits into existing power relations. In this respect, the colonial world is at once an extreme and an extremely revealing example.

The physicians' surprise at how very effective their method was – it cured both the control group and those who actually received the injection – recalls the curious results of controlled deworming experiments<sup>(1)</sup>, which led to a soaring increase in controlled experiments conducted in the service of economic interests. Times have changed, but the impossible quest for a miracle remedy to all problems (those of Africa and the world, development problems) subsists. This book reminds us of the complexity of colonial policies and colonial history, too guickly and too readily forgotten. And beyond that, the complexity of the world altogether. In this respect it is indispensable reading for anyone interested in colonialism or working on health policies, either of vesterday or today.

Lionel KESZTENBAUM

<sup>(1)</sup> On this subject see, for example, http://www.columbia.edu/~mh2245/w/worms.html