

Dear friends of clinical journal club - load the file down at <https://www.mdc-berlin.de/cjc>. This website also gives you access to my seminar on Wednesdays 16:00 English and 17:00 German. You need to click on *Besprechung beizutreten*. If it fails to work immediately, keep on clicking.

N Engl J Med is not publishing this week, but a case is made available, nonetheless. A 9-year-old girl presented to the dermatology department with a 7-day history of a lesion on the left cheek and a 4-day history of fever. On physical examination, a round plaque 3 cm in diameter on an erythematous base was observed on the patient's left cheek, with overlying crusting and a single intact vesicle. Satellite vesicles and ipsilateral cervical lymphadenopathy were also present. There were no mucosal lesions. What is the most likely diagnosis? You are offered: Cutaneous non-tuberculous mycobacterial infection, Impetigo, Primary cutaneous HSV-1 infection, Syphilitic chancre, and Tinea corporis. The tiny blisters are the clue. Europe had its hottest day last week. N Engl J Med reviewed heat-related illnesses in 2022. We re-inspect the issue. What to do with a 71-year-old man with heart disease who presents to an emergency department with confusion and has a core temperature of 40° C? His oxygen saturation at 3 L oxygen flow is 90%. Heat can be lost by conduction, convection, radiation, and sweating. The key signs are mental status and core body temperature. Risk factors, preventive strategies, and treatments are discussed. The patient belongs in an intensive care unit and requires prompt temperature reduction. In the Lancet, general and abdominal adiposity and hypertension are reviewed in 7.5 million people from eight world regions. Body mass index is one parameter, but the height-to-weight ratio gives a better estimation of abdominal body fat. The higher values here are associated with hypertension prevalence >40%. We gain insight into why cardiovascular death is the commonest cause world-wide. Misoprostol is a prostaglandin-E analog. It stimulates (among other things), uterine contractions and reduces cervical tone. Mifepristone is a progesterone receptor blocker; progesterone is required for pregnancy maintenance. A Swedish study addresses medical abortions between 12-22 weeks initiated outside of the hospital setting. Trauma care in the Gaza war is catastrophic. Could telemedicine help here? Lancet next covers the Nasser Hospital in Gaza during the 2023-24 military assault. One not-fully trained surgeon remained and a few other doctors to help with anesthesia. Global telemedicine was

provided by a multi-user WhatsApp group. Yes, ethical approval was obtained. We review 12 very serious operations involving penetrating trauma all operated upon by one surgeon guided by WhatsApp. This strategy worked until the Nasser Hospital became completely nonfunctional. The Lancet case involves a 44-year-old Down Syndrome patient with cerebral amyloid angiopathy. The Lancet review is on X-linked hypophosphatemia. This rare condition involves inactivating mutations in the Phosphate-regulating endopeptidase X-linked (PHEX). The PHEX enzyme is a zinc dependent metalloproteinase that cuts matrix proteins. When nonfunctional, fibroblast growth factor-23 (FGF23) levels are high, causing “phosphate diabetes”, rickets and osteomalacia. An antibody against FGF23 that blocks its action, burosumab, is now available. The Lancet policy paper addresses the lack of GLP-1 agonists in terms of international coverage. In Science Magazine, we learn of a novel neural pathway that explains how opioids reduce pain transmission. The pathway extends from the rostral ventromedial medulla to dorsal horn neurons, where signals can be either tolerated or blocked. The findings could introduce nonopioid methods of controlling pain. In Washington Post, we learn that Americans now employ “neck fans” to fight the heat. The fans, we are told, are “everywhere”. The oral next presentations in English and German will be Sept. 11.

Best regards, Fred Luft, at <https://www.mdc-berlin.de/cjc>