

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 failed to publish an issue this week (on break I suppose) but they did enclose a mystery patient. A 71-year-old man presented with a 2-year history of a gradually darkening line on his left thumbnail. Which of the following is the most likely diagnosis? You are offered: Fungal melanonychia, Nail lentigo, Nail melanocytic nevus, Subungual hematoma, and Subungual melanoma in situ. Hint: the hyperpigmented fingernail is consistent with Hutchinson's sign. The Lancet published an issue this week. The first is an important paper on the blood pressure-lowering efficacy of antihypertensive drugs and their combinations: a systematic review and meta-analysis of the trials published to date. The combination efficacy could be classified as low, moderate, and high intensity. The authors included an on-line "efficacy calculator":

<https://www.bpmodel.org/blood-pressure-treatment-efficacy-calculator/> to help practicing physicians. Chronic rhinosinusitis, with and without nasal polyps, is a vexing condition and treatment effects are uncertain. A randomized trial of endoscopic surgery compared to long-term clarithromycin or nasal irrigations (saline and steroids). The endpoint was the SNOT-22 score. The endoscopic surgery won out and clarithromycin was not helpful. Globally, the leading causes of death are noncommunicable diseases (NCDs) such as cardiovascular diseases (heart attacks and strokes) and cancers, which account for most deaths, particularly in low- and middle-income countries. COVID-19 and lower respiratory infections also remain significant causes of mortality. A descriptive analysis from the third Lancet Commission on Global Health 2050 gives projections. The Lancet review is on acute lymphocytic leukemia; lots of progress reported here. A second Lancet review concerns bipolar disorder. Lithium is still there but has fallen back compared to other options. Pseudouridine is the most abundant modified nucleotide in RNA, created by isomerizing uridine into a different form where the base is attached to the sugar at a different point. The additional hydrogen bond donor in pseudouridine strengthens the RNA molecule's structure and interactions with other molecules. Effective SARSCo-

V2 RNA vaccines use pseudouridine. This property is handy for transfer RNAs (tRNA). In Science Magazine, we learn that a specific tRNA-Asp-GTC-3' tDR induces RNA autophagy in kidney cells. Failure of this process leads to acute kidney injury (AKI). AKI upregulates the synthesis of tRNA-Asp-GTC-3' tDR. Delivery of tRNA-Asp-GTC-3' tDR provided nephron protection. In Washington Post, we learn how wild horses became rideable, according to ancient DNA. Join me on Wednesday, September 10 for the above and more in another stunning, orally presented, clinical journal club, 16:00 in English and 17:00 in German.

Sincerely, Fred Luft

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