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Hindsight: Top 5 Tools for Practice of 2020

1. What is the diagnostic accuracy of primary care physicians performing virtual visits compared to in-person visits for undifferentiated presentations?
 - **Bottom Line:** Based on limited, lower-level evidence, diagnostic accuracy of virtual visits was between 71-91%, measured using standardized patients or case review at 3 months. Diagnostic accuracy/agreement of virtual care seems similar to in-person visits. These studies do not address continuity of care or patient outcomes.
2. In type 2 diabetes, do dipeptidyl peptidase-4 (DPP-4) inhibitors improve patient-oriented outcomes like cardiovascular disease (CVD)?
 - **Bottom Line:** DPP-4 inhibitors have no effect on patient-oriented outcomes like CVD (example myocardial infarction or stroke) or death. They increase the risk of hypoglycemia, pancreatitis and likely heart failure hospitalization. The choice for second line therapy after metformin should focus on drugs that reduce the risk of CVD (ie. SGLT-2 inhibitors or GLP-1 agonists).
3. What is the chance of obtaining an incorrect result with the polymerase chain reaction (PCR) test for COVID-19?
 - **Bottom Line:** If the PCR COVID-19 test is positive you have COVID-19 (specificity ~100%). Small Canadian studies suggest the test will detect COVID-19 ~80-90% of the time (sensitivity), although estimates range from ~50%-90%. Collection technique, anatomical sample and timing of collection influence these numbers. The chance of a false negative depends on sensitivity and the pre-test probability. Example: someone with abnormal chest x-rays and close COVID-19 positive contacts has a higher risk of false negatives than someone who is asymptomatic.
4. Is exercise effective for hip/knee osteoarthritis pain management?
 - **Bottom Line:** In adults with knee or hip osteoarthritis, exercise can lead to ~30% pain improvement for 47% of patients versus 21% with no exercise at 6-104 weeks, benefiting one additional person for every 4 treated. The type of exercise does not significantly affect the results, however most included trials utilized physiotherapy.
5. To prevent gout recurrence, should we dose urate lowering therapies (like allopurinol) to target uric acid levels?
 - **Bottom Line:** Best evidence finds that increasing doses of allopurinol to achieve a specific serum urate target (example <360 µmol/L) does not reduce gout flares, pain, or function, compared to standard allopurinol dosing. Febuxostat increases cardiovascular and overall mortality and should not be used in most patients with gout.

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Disclosures:

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