2/24/2020
Based on recent systematic review with network meta-analysis, which statement is true regarding water immersion (WI), water exchange (WE), insufflation colonoscopy (CO2), and air insufflation colonoscopy (AI)?

A. WE and WI had comparable adenoma detection rate, and are better than that of CO2
B. For right sided colonic adenoma detection rate, WE was superior to WI and AI
C. Bowel cleansing in WE was superior to CO2
D. Cecal intubation time were comparable among WI, WE, CO2 and AI
E. Compared to WE and WI, real-time insertion pain was significantly higher for AI and CO2

Answer: B
Rationale: WE had a significantly higher entire colon overall adenoma detection rate when compared with WI (OR, 1.31; 95% CrI, 1.12-1.55), AI (OR, 1.40; 95% CrI, 1.22-1.62), and CO2 insufflation (OR, 1.48; 95% CrI, 1.15-1.86). WI was not superior to AI or CO2 insufflation regarding adenoma detection rate. WE showed a significantly higher right side of the colon ADR than AI (OR, 1.54; 95% CrI, 1.23-1.93) and WI (OR, 1.36; 95% CrI, 1.10-1.70). WI did not differ from AI. For bowel cleansing using Boston Bowel Prep Score, WE (score, 7.4, 95% CI 7.0-7.8) and CO2 (score 7.3, 95% CI 7.0-7.6) insufflation were comparable (MD, 0; 95% CrI,−.80 to .82). WE achieved significantly higher cecal intubation time, as compared with AI (MD, 2.62; 95% CrI, .66-4.52), CO2 insufflation (MD, 3.3; 95% CrI, .49-6.07), and WI (MD, 3.32; 95% CrI, 1.03-5.58). Real-time insertion pain was significantly higher for AI versus all other techniques. In detail, CO2 versus AI yielded an MD of - 1.89 (95% CrI, – 3.23 to – 0.58), WI versus AI yielded an MD of - 1.54 (95% CrI, − 2.37 to − .72), and WE versus AI resulted in an MD of - 1.99 (95% CrI, − 2.82 to − 1.21). Other comparisons were not significant.