

Midwest Geriatrics – Palliative Fellowships Consortium

GERIATRICS TWITTER JOURNAL CLUB

#GeriJC

High-Sensitivity Cardiac Troponin I for Risk of Stratification in Older Adults

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Dr. Nikhil Tarte, Geriatrics Fellow from University of Illinois - Chicago leads discussion on this study (see video)

T1. What are the most interesting aspects of the paper?

@GeriEducator: Very large sample. VA data, tied in the CMS and Pharm data (can only be done within VA). #GeriJC

@WesGodfrey1: I think the point Dr. Tarte made in his video re: use in patients age >90 and dementia was particularly salient. The study limitations are notable, but it certainly gives me pause in two pt pop. I would otherwise have been almost automatic in de-prescribing.

@GeriEducator: Statin therapy worked in 90 years and older and patients with dementia. So is Age a confounding factor anymore? #GeriJC

@BERosensteinMD: 1. Included pts with dementia (often excluded) 2. New-user design 3. Relatively large sample that were >75 yo not already on a statin (Calc. ASCVD risk >20% at 75 yo & no other risks) #GeriJC

T2. Were the analytical approaches used in the study appropriate?

@GeriEducator: #GeriJC This comes from our population health expert: They combine the secondary outcomes into one measure (table 2). Did this tell them anything new? Are MI and Stroke significant by themselves or only with CABG?...

@GeriEducator: ...This is sometimes done when some variables are not found to be significant. Combining weak variable with strong variables can make the weak ones seem strong, in a sense they are then significant... #GeriJC

@GeriEducator: ...However, it's important to remember that they had no significance on their own and it may be the combined variable is significant only because CABG was so important. #GeriJC

@BERosensteinMD: Overall, strong statistical analysis. But, though cohorts were matched by -dementia, arthritis, polypharm, gait, & fatigue to pick up frailty; -polypharm, gait & fatigue weren't separated in the outcomes analysis ->potentially missing effects of frailty on outcomes #GeriJC

@GeriEducator: @curcumin. Wonder whether imputation of values below 1.2ng/L as 0.6 ng is legitimate. And, what would happen to the data if the imputation was lower (0.3) or higher (1.0) for example. #GeriJC

@GeriatricsJC: In order to talk about T2, Dr. Radhika Sreedhar, Associate Professor, Clinical Medicine @UIC_GERITWEETS presents these excellent presentations. Video 1 - Explains what observational studies are with respect to this article in question #GeriJC

@GeriatricsJC: In statistics, a confounder is a variable that influences both the dependent variable and independent variable, causing a spurious association. Dr. Sreedhar talks about confounding variables (video 2) #GeriJC

@GeriatricsJC: With such a large data set, the propensity analysis comes into play. Listen in on Dr. Sreedhar's presentation on this (video 3) #GeriJC

@GeriatricsJC: Propensity Analysis continues (video 4) #GeriJC

@GeriEducator: Excellent presentation Dr. Sreedhar. Our population expert Dr. Klug calls it magic. She says about the magical propensity analysis: It is a good way of taking many many variables and combining them into a weight or a value that can be applied to each observation...#GeriJC

@GeriEducator: ...This allows for complex control of the covariates on the analyses. The drawback is it does not allow you to clearly see individual effects of the variables, they can only be viewed together in a mush with every other covariate #GeriJC

T3. Does the study add new knowledge to established foundations?

@GeriEducator: T3: Pretty sure it does. With statins working in patients over 90 years of age, the age as limiting factor for statin therapy may not hold as well. @TarteNikhil thoughts? And please correct me if I'm wrong here #GeriJC

@NDgeriDocDahl: Will pause and consider in those oldest males otherwise health/robust and with dementia, but still #patientcentered approach based on #goalsofcare and #whatmattersmost!

@BERosensteinMD: A3) Hard to know as concerned about confounding (see A4). However, in the well-selected older adult, this would support that statins likely have benefits, including those who may fit "pre-frail" #GeriJC

T4. What are the weaknesses of the study (design)?

@GeriEducator: Gender Bias? 97% men but not sure if this is in the author's control #GeriJC

@BERosensteinMD: A4) Confounding: older adults started on statin later in life potentially w/ decrease frailty, increase function, decrease multimorbidities, increase expected life span

Outcomes: MI/CVA can cause sig. functional decline. Did statins prevent big fatal event, but still CVD w/functional deficits? #GerijC

@BERosensteinMD: A4 contd) Dementia: Likely unable to separate early, mid, late-stage from HER retrospective data-set, but possible confounder on its own

@NDgeriDocDahl: Mostly men, and did not look at frailty or side affects

Through article addressing weakness of current CVD prediction models (PCE, ASCVD risk calc) r/t age, relatively young cohort w/avg age 75. How to apply to those 80, 90... #GerijC

T5. How would you introduce the findings in your practice?

@GeriatricsJC: @KahliGoBlue @drcavitale thoughts? #GerijC

@drcavitale: T5) In a very functional 90+ year old, this study would appear to support continuation of statins, although I would want to consider pill burden, QOL, & patient preferences – not only cardiovascular and mortality outcomes in the decision to continue statins #GerijC

@WesGodfrey1: For me, I will at least be increasingly thoughtful about primary prevention in our oldest old. Reminds me of the SPRINT trial, where specific populations, even in chronologically 'old', may benefit from aggressive risk factor modification

@GeriEducator: @curcumin @NDgeriDocDahl thoughts? Is Simvastatin recommended under current guidelines?

@BERosensteinMD: A5) Statins may have benefits in some of our older patients but starting them continues to require a wholistic view based on far more than age alone. #GerijC