Prognostic value of fasting cholesterol is no better than nonfasting

Doran B, Guo Y, Xu J, et al. Prognostic value of fasting versus nonfasting low-density lipoprotein cholesterol levels on long-term mortality: insight from the National Health and Nutrition Survey III (NHANES-III). *Circulation.* 2014; 130(7):546–553.

This study was a secondary analysis of data from NHANES III, 1988–1994. Subjects were followed an average of 14 years to assess the prognostic value of fasting vs nonfasting low-density lipoprotein (LDL) cholesterol levels for all-cause and cardiovascular (CV)-specific mortality. Fasting vs nonfasting total cholesterol and triglyceride levels were also compared.

Investigators used the c-statistic common in the CV literature to describe the ability of a test to discriminate between cases and noncases. In this study the cases were represented by all-cause and CV-specific mortality.

In all analyses, no significant difference was noted between fasting and nonfasting lipid levels. In the matched cohorts assessing all-cause mortality, LDL levels had similar prognostic value in fasting (c-statistic 0.59; 95% CI, 0.57–0.61) vs nonfasting (c-statistic 0.58; 95% CI, 0.56–0.60, *P*=.73) subjects. The same was true for CV-specific mortality (fasting c-statistic 0.62; 95% CI, 0.60–0.66 vs nonfasting 0.62; 95% CI, 0.60–0.66; *P*=.96). LDL was predictive of death, controlling for confounders, with no significant interaction between LDL and fasting status.

Prognostic power of fasting vs nonfasting levels of triglycerides and total cholesterol also showed no significant differences for either all-cause or CV-specific mortality.

Conclusions about the relevance of fasting for LDL levels held true regardless of fasting time (4 vs 8 vs 12 hours), presence or absence of diabetes, length of follow-up (5, 10, and 15 years), matched vs unmatched analysis, and even in subjects with triglyceride levels >400 mg/dL.

Relevant	Yes	**Medical care setting**	Yes
Valid	Yes	**Implementable**	Yes
Change in practice	Yes	**Clinically meaningful**	Yes

Bottom line: When ordering cholesterol panels, there is no need to worry about when your patient last ate.

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Dose may matter: Higher risk of suicide for young people at certain doses of SSRIs

Miller M, Swanson SA, Azrael D, Pate V, Stürmer T. Antidepressant dose, age, and the risk of deliberate self-harm. *JAMA Intern Med.* 2014; 174(6):899–909.

This was a prospective cohort study of a commercial pharmaceutical claims database of nearly 163,000 US patients 10–64 years old with a clinical diagnosis of depression within the previous 12 months (January 1998–December 2010). Patients were included if they had been newly started on citalopram, sertraline, or fluoxetine. Patients who received any other antidepressant or dosages outside the recommended ranges were excluded.

The data were analyzed in 2 groups: patients receiving exactly the recommended doses (citalopram 20 mg; sertraline 50 mg; fluoxetine 20 mg daily) and patients receiving more than the recommended dose, but not more than the maximum daily recommended dose.

Patients were followed for 60 days after the end of the last prescription or until they no longer met inclusion criteria. Self-harm was identified using ICD-9 codes.

Patients aged 10–24 years taking higher doses had an increased risk of suicide (31.5 events per 1,000 person-years [95% CI, 24.9–39.3] in the high-dose group vs 14.7 [95% CI, 11.5–18.5] in the recommended-dose group). The risk was highest during the first 3 months of therapy.

The rate of deliberate self-harm in this age group was twice as high for those initiated with high-dose therapy vs the recommended dose (HR 2.2; 95% CI, 1.6–3.0). This translates to 1 additional self-harm event for every 150 patients treated with high-dose therapy.

No significant dose effect was noted among patients aged 25 years and older.

Relevant	Yes	**Medical care setting**	Yes
Valid	No	**Implementable**	Yes
Change in practice	Yes	**Clinically meaningful**	Yes

Bottom line: This study was not designed to assess whether people with the most severe depression (and the highest risk of self-harm) were started on the higher doses of SSRIs, so we cannot draw conclusions about the safety of different dosages of SSRIs. Nevertheless, starting patients on the lowest effective dose is still prudent. EBP

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