Risk for carditis tied to second dose of Pfizer-BioNTech COVID-19 vaccine

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(HealthDay)—Despite a low absolute risk, there is an increased relative

risk for carditis associated with BNT162b2 (Pfizer-BioNTech) vaccination, particularly among men and adolescents, according to a study published online Jan. 25 in the *Annals of Internal Medicine*.

Francisco Tsz Tsun Lai, Ph.D., from University of Hong Kong, and colleagues examined the association of BNT162b2 and CoronaVac (Sinovac) vaccination with carditis. The analysis included 160 case patients (inpatients aged 12 years and older first diagnosed with carditis) and 1,533 matched inpatient controls.

The researchers found that the incidence of carditis for CoronaVac was 0.31 per 100,000 doses administered and 0.57 for BNT162b2. Recipients of the BNT162b2 vaccine had higher odds of carditis (adjusted odds ratio [OR], 3.57) than unvaccinated persons. The risk with the BNT162b2 vaccine was higher for males than females (ORs, 4.68 versus 2.22) and higher for adolescents than for adults (ORs,13.79 versus 2.41). For myocarditis, with BNT162b2, the OR was 9.29 (95 percent confidence interval, 3.94 to 21.91), but it was 1.06 (95 percent confidence interval, 0.35 to 3.22) for pericarditis. Risk for carditis was mainly seen after the second dose of BNT162b2. No similar increased carditis risk was seen with CoronaVac.

"Although the absolute risk is very low, this elevated risk should be made known to vaccine recipients and physicians and be weighed against the benefits of vaccination," the authors write.

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