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In this case, $a_n(0) = 0$, and

$$\dot{a}_n(0) = \frac{2vD}{L} \int_0^L \delta(x - L/2) \sin \frac{n\pi x}{L}\, dx \Rightarrow$$

$$\dot{a}_n(0) = \frac{2vD}{L} \sin \frac{n\pi}{2} \quad \text{and} \quad \omega_n^{-1} \dot{a}_n(0) = \frac{L}{n\pi v} \frac{2vD}{L} \sin \frac{n\pi}{2}$$

$$\boxed{q(x,t) = \sum_1^\infty \frac{2D}{n\pi} \sin \frac{n\pi}{2} \sin \frac{n\pi v}{L} t \sin \frac{n\pi x}{L}}$$

. Again, only the odd harmonics are excited, but now they have relative amplitudes $\sim n^{-1}$. The fact that only odd harmonics were excited in this problem and the last one is due to the condition that the string was plucked or struck in the center. Had it been plucked or struck elsewhere, even harmonics would have been excited as well.