(1) Can a helium balloon lift the tank the helium came in?

A spherical tank of radius a, wall thickness t, and density ρ_{wall} weighs $4\pi a^2 t g \rho_{wall}$; if it contains helium at pressure P, the stress on the wall is $S = aP/t$. At atmospheric pressure P_0 the helium displaces air weighing $(4\pi/3)a^3 g \rho_{air} (P/P_0)$. If this equals the tank weight then $S = (3/2)P_0 (\rho_{wall}/\rho_{air}) = 150\,000$ psi for steel *independent* of a, t, and P. The stress would be twice as large for a cylindrical tank. The answer is no. Steel is not strong enough.