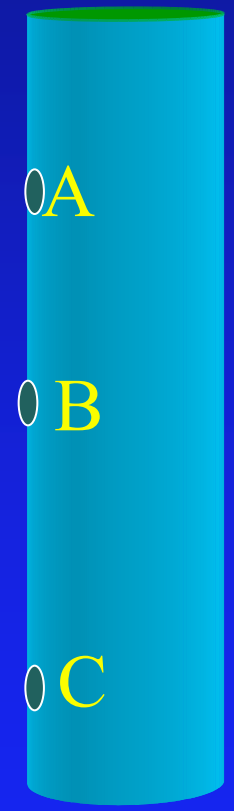
Bernoulli ACT

- Through which hole will the water come out fastest?

$$P_1+\rho g y_1 + \tfrac{1}{2}\rho v_1^2 = P_2+\rho g y_2 + \tfrac{1}{2}\rho v_2^2$$



Note: All three holes have same pressure
P=1 Atmosphere

$$\rho g y_1 + \tfrac{1}{2}\rho v_1^2 = \rho g y_2 + \tfrac{1}{2}\rho v_2^2$$

$$g y_1 + \tfrac{1}{2} v_1^2 = g y_2 + \tfrac{1}{2} v_2^2$$

Smaller y gives larger v. Hole C is fastest