

Erratum: “Design and Preliminary Testing of a Novel Dual-Chambered Syringe” [Journal of Medical Devices, 2011, 5(2), 021003]

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The following figures have been corrected:

Balance of Forces on the Meniscus

F_b is the buoyancy force and is directed upward with respect to the Earth’s surface

F_γ is the surface tension force and is directed along the contact angle (θ) at the edge of the meniscus

F_g is the gravity force and is directed downward with respect to the Earth’s surface

P_1 is the pressure in the fluid applied equally and perpendicular to all surfaces including the meniscus and the inner walls of the conduit and cartridge chamber.

P_2 is the pressure in the air applied equally and perpendicular to all surfaces including the meniscus and the inner walls of the conduit

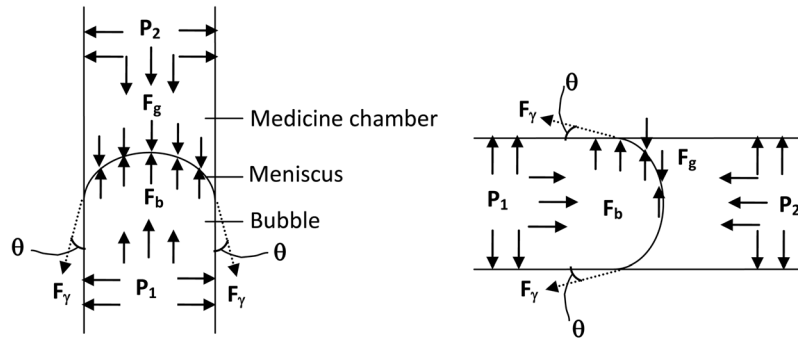


Fig. 2 The bubble, shown (left) in the upright position and (right) on its side, prevents mixing between the two chambers and is stabilized by a balance of pressure, surface tension, gravity and buoyancy forces

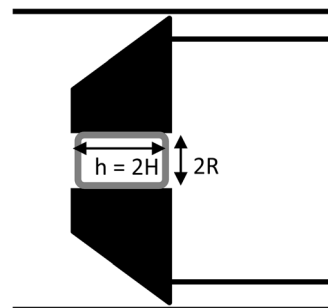


Fig. 3 Cross section of small channel showing the bubble dimensions: R, radius; h, length; H, half length