

## Hole-in-the-heart linked to migraine

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LONDON: Experts have found a way to employ the body's natural healing power to treat a common heart defect linked with stroke and migraine.

One in four people has a valve-like hole in the heart, known as a patent foramen ovale (PFO). The defect can be closed surgically using a graft, but this can cause damage to surrounding tissue.

A team at London's Royal Brompton Hospital has used a 'bioabsorbable' patch to solve the problem. The patch acts as a temporary plug until the body replaces it with healthy normal tissue, usually within 30 days. The healing is very similar to how the body would heal itself normally.

PFO, an opening in the wall between the two upper chambers of the heart, usually produces no symptoms, but in some people it significantly increases the risk of stroke and migraine. In the womb, the opening is necessary to allow efficient circulation of blood and oxygen before the lungs start working.

After birth, the hole should close to separate the two chambers. Sometimes, however, this does not occur correctly. And when pressure is created inside the chest - for instance by coughing - a flap can open, allowing blood to flow in either direction.

In turn, this means blood can bypass the filtering system of the lungs and if debris are present in the blood, such as small blood clots, these can travel to and lodge in the brain, causing a stroke.