

# Mum's the word for ailing

## The Amniotic Membrane, Derived From The Womb, Is A Storehouse Of Cures

TIMES NEWS NETWORK

**Mumbai:** ● Twelve-year-old Zion's left eye was terribly damaged when a firework accidentally burst during the Diwali frenzy last year. The prognosis looked grim for the Andheri school-boy till the doctor used something unusual to hasten the healing process: a swathe of amniotic membrane graft.

● Neha (4) dropped some sauce into her left eye, suffering chemical burns. "The damage was extensive and to prevent her eye from melting away, we did an amniotic membrane graft," recalls cornea surgeon Dr Vandana Jain at Aditya Jyot Hospital in Sewree. The child is recovering well, she adds.

AMG, as the amniotic membrane graft is better known as, could easily be one of the best gifts from mothers to the ailing, say doctors. Derived from the membranes surrounding babies in their mother's womb, the amniotic membrane is usually discarded along with the placenta.

But in recent years, amniotic membrane has emerged as a storehouse of cures, with researchers now claiming it contains stem cells as versatile as embryonic stem cells in multiplying



### INTERNATIONAL MOTHER'S DAY

#### AMNIOTIC MEMBRANE GRAFTS HELP...

- Chemical or thermal burns of the eye
- Persistent corneal surface defects
- Corneal infections
- Damaged cornea after cataract surgery
- Corneal damage due to drug reactions
- Post-cancer treatment

into any cells, be it liver or pancreas.

Dr Sunil Morerkar from Hinduja Hospital, Mahim, who treated Zion, calls it a bandage of sorts. "It can be used for its healing properties to grow new epithelium (skin on the eye surface)," says Dr Morerkar, adding that it also prevents pain. "I have personally used it with excellent results in burns, eye plastic surgery and reconstructions, orbital implants and infections and inflammations," he says.

Amniotic membrane is also being used in the city to help in cancer treatment, says Dr Debraj Shome, facial plastic surgeon and ocular oncology surgeon at Aditya Jyot Eye Hospital and Tata Memorial Hospital. "I use amniotic membrane to reconstruct the ocular surface after removing cancers from the surface of the eye," he explains.

Previously, healing the cancer-affected eye used to take long. "But now the mother's healing touch ensures

these eyes heal faster," insists Dr Shome.

There is more. According to Dr Jain, the stem cells of the eye can be cultured on amniotic membrane in the laboratory and subsequently be used to give vision to badly damaged eyes. "Amniotic membrane is a boon for ophthalmologists," she says. Dr Shome also finds amniotic membrane useful in reconstructing sockets of children who underwent radiotherapy post cancer.

However, there is one small problem with getting an abundance of amniotic membrane. "There is a need to create awareness about the healing qualities of this membrane as people are very sceptical about donating it," says Dr Jain. Dr Morerkar concurs, "As per tradition, the after-birth is buried. So, we need to tell people that there is a need to donate amniotic membrane as it can help the healing process for a range of patients." Moreover, one placenta provides sufficient amniotic membrane for 20-30 eye surgeries, says Dr Shome.

At present amniotic membrane is thoroughly processed and supplied from Tata Memorial Hospital, Parel, to various hospitals needing it.

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