

Venom protein may lead to brain cancer cure

Says study

REUTERS, Washington

Doctors seeking treatments for malignant brain tumours have found promise in the venom of scorpions, according to a study released on Friday.

The study showed that a synthetic version of a protein found in the venom of giant yellow Israeli scorpions targeted tumour cells but did not harm the healthy cells of brain cancer patients.

"We're testing a new agent that has a lot of potential for patients who have had no meaningful treatments thus far," said Dr Adam Mamelak, lead author on an article to appear in the August issue of the Journal of Clinical Oncology.

In the study, 18 patients first had surgery to remove malignant gliomas, a lethal kind of brain tumour. Then doctors injected their brains with a solution of radioactive iodine and TM-601, the synthetic protein.

The solution bound almost exclusively to leftover tumour cells, suggesting that it could be combined with chemotherapy to fight cancer. Furthermore, two study patients were still alive nearly three years after the treatment.

Because life expectancy for the 14,000 annual glioma patients in the United States is typically a matter of months, the results shore up animal research indicating that the venom protein may inhibit tumour growth even without a radioactive component, Mamelak said.

"Does that mean that the drug was miraculous? No," said Mamelak, a neurosurgeon at Cedars-Sinai Medical Center in Los Angeles. "But we have shown that it is safe and that we should at least move forward."

The synthetic scorpion venom was developed by Transmolecular Industries, Inc., a Boston-based company, and is one of several medicines recently derived from animal poisons.

Other researchers are investigating whether a protein in snake venom can stop bleeding and whether Gila monster venom can treat diabetes.

They also have developed a painkiller based on the venom of a deadly sea snail.

Work with these proteins and molecules is the natural progression from previous science studying simpler plant extracts that have yielded

key medicines, said Michael Egan, president of Transmolecular Industries.

"Evolution has had this stuff for a while, so chances are (animals) have a few things we can take advantage of," Egan said.

Giant yellow Israeli scorpions live in the deserts of the Middle East and grow to about 4 inches long.

Flash floods kill 10 in Pakistan

AP, Peshawar

Flash floods caused by heavy monsoon rains yesterday killed at least 10 people in a remote village of northwestern Pakistan, an official said.

Dozens of mud and stone-built homes were washed away when a deluge of flood water hit the village of Karak, about 80 kilometers (50 miles) southwest of Peshawar, said Rahmat Salam, a district mayor.

"A rescue operation is under way in Karak, and so far we have found 10 bodies," he told The Associated Press.



PHOTO: STAR

Dainik Ittefaq Karmachari Steering Committee observes a token hunger strike at Ittefaq Bhaban in the city yesterday demanding fair investigation into the Kamaluddin murder case and compensation for family members of the victim.

Indonesian volcano forces locals to shelter in schools

REUTERS, Jakarta

Flows of lava accompanied by showers of molten rock shooting into the sky have forced villagers living close to a volcano in eastern Indonesia to shelter in schools and churches, officials said yesterday.

Dali Ahmad, an Indonesian volcanologist, said by telephone that there did not appear to be a danger of a major eruption by Mount Karangetan at the moment but the lava continued to threaten nearby villages.

There have been no reports of casualties so far from the volcano on Siau island, which lies north of Manado on Sulawesi island, 2,200 km (1,365 miles) northeast of the capital Jakarta. "It is true that lava is flowing but it is not as strong as yes-

terday and only flowed 2 km (1.2 miles). But there is no buffer," Ahmad said by telephone from the Centre of Volcanology and Geological Disaster Mitigation in Bandung.

He said the alert status on the mountain was still at maximum.

A health ministry official said that 3,491 people or 891 families had fled the area close to the volcano, although he said data was only for the eastern part of the remote island where the volcano is situated.

"Refugees are staying at schools and churches. There are flows of lava and it is raining down," Rustam Pakaya said. Indonesia is predominantly Muslim, but there are also large numbers of Christians in some areas.