

# Possible cure found for 'medically untreatable' liver disease: Study

## Cheap drug prescribed for certain hormonal disorders may be answer: Duke-NUS team

Low De Wei

A liver disease thought to be medically untreatable can likely be tackled using a cheap drug prescribed for certain hormonal disorders, researchers have found.

A recently published study by re-

searchers from Duke-NUS Medical School found that 20 patients who suffer from non-alcoholic fatty liver disease (NAFLD), saw significant improvements in their condition after being administered small doses of the drug over four months, in a clinical trial. The disease is estimated to afflict more than 30 per

cent of Singaporeans.

While there is still a long way to go before this option can be used to treat patients here, researchers are confident that it holds promise for those suffering from the disease.

NAFLD is caused by the accumulation of excess fat in the liver which is not attributed to heavy drinking. If left untreated over time, an estimated 4 per cent of patients can ultimately suffer from scarring of the liver, which can result in liver failure and cancer.

But the only way to treat the disease currently is through lifestyle changes, said Dr Eveline Bruinroop, a research fellow at Duke-NUS who worked on the study. Patients are usually advised to reduce their consumption of sweet beverages and food with high calories, and exercise for 50 minutes three times a week, a strict regime that many find hard to stick to, she said.

With rising obesity levels, more Singaporeans are at risk of getting the disease. A study published by

SingHealth doctors last year suggested that there is a rise in incidence of the disease in Singapore.

Duke-NUS researchers had previously found thyroid hormones can reduce fat content in rats' livers. The drug is currently used to treat conditions like hypothyroidism, which causes symptoms such as a lack of energy and depression.

Working in conjunction with the Singapore Clinical Research Institute (SCRI) and the Agency for Science, Technology and Research's

Singapore Bioimaging Consortium, the researchers reached out to six hospitals to recruit patients for the study.

But since the study's conceptualisation in 2011, they have faced significant challenges in landing sufficient funding for it, said Associate Professor Teoh Yee Leong, the chief executive of SCRI, which spearheaded fund-raising and coordination efforts for the clinical trial.

Compared with big pharmaceutical firms, which can fund million-dollar studies over one or two years, the researchers could raise only \$380,000 to fund their research, said Prof Teoh.

"It is like preparing a Michelin star-standard meal inside your own family kitchen," he said.

But despite the difficulties, the researchers plan to push on and raise more funding to conduct a more extensive clinical study, he said.

lowdewei@sph.com.sg