TB drug could reduce mortality for MDR-TB and XDR-TB cases

September 26 2012

Results from an observational study evaluating a new anti-TB drug have found that the treatment can improve outcomes and reduce mortality among patients with both MDR-TB and XDR-TB.

The research, published online ahead of print today in the European Respiratory Journal, suggests a drug called delamanid could have a public health benefit for MDR-TB and also for XDR-TB, as few effective treatment options are currently available.

Over the past two decades, multidrug-resistant TB (MDR-TB) has emerged as a significant public health threat, with strains of TB growing increasingly resistant to first-line drugs. MDR-TB hampers progress towards the global elimination of TB and recently it has further evolved into an even more resistant form, called extensively drug-resistant tuberculosis (XDR-TB).

The WHO Global Plan to Stop TB 2011-2015 has called for urgent development of new drugs with novel mechanisms of action to treat all forms of TB, including MDR and XDR-TB.

A randomised control trial has previously evaluated the effectiveness of 2 months treatment with different doses of the drug. The new study followed the same patients and observed the outcomes of their treatment for a further 24 months.

421 patients took part in the observational study and researchers

examined the effects of delamanid when taken in combination with a World Health Organization-recommended background treatment regimen. The researchers classified the patients into either a favourable outcomes group, where the patient was cured or completed the treatment, or an unfavourable outcome, where the patient had failed the treatment course, defaulted or died.

The results found that 74.5% of patients taking delamanid for more than 6 months had favourable outcomes. This compared to 55% of patients taking the drug for less than 2 months. Furthermore, only two patient deaths occurred in the long-term group, compared to 19 in the short-term treatment group.

In the subset of patients suffering with XDR-TB, 61.4% of patients in the long-term group experienced favourable outcomes, compared with 50% in the short-term group. Mortality was also reduced within this subset.

Lead author, Vija Skripconoka from the Riga East University Hospital, said: "The observational study has shown that when delamanid is taken for at least 6 months with a WHO-recommended background treatment regimen, it can improve outcomes for patients with MDR-TB and XDR-TB. This is extremely positive news given that similar studies of different treatments rarely report favourable outcomes above 70% or mortality rates below 15%. The 1% mortality rate measured in this study is very promising. A further randomised-control study is currently enrolling a large group of people to confirm delamanid's effectiveness and monitor side-effects."

Provided by European Lung Foundation

Citation: TB drug could reduce mortality for MDR-TB and XDR-TB cases (2012, September 26)