

Sepsis risk from cut in antibiotics

By Sarah Knapton SCIENCE EDITOR

WITHHOLDING antibiotics for common infections in the over-65s may increase the risk of deadly sepsis, researchers have warned.

— Under new guidelines to fight antibiotic resistance, GPs have been discouraged from giving pills for infections, leading to a 7.4 per cent reduction in the amount of antibiotics prescribed between 2014 and 2017.

But research from Imperial College London, which looked at 150,000 patients aged over 65 between 2007 and 2015, found that for every 37 patients not given antibiotics for urinary tract infections, one case of sepsis would occur that would have been prevented with immediate antibiotics.

They also found that the rate of hospital admissions was around double (27 per cent) in patients with no or deferred prescriptions, compared with immediate prescriptions (15 per cent).

Urinary tract infection (UTI) is the most common bacterial infection in older patients, with 20 per cent of over-65s suffering an infection each year.

The odds of developing a bloodstream infection within 60 days was sevenfold and eightfold higher in the

deferred antibiotic and no antibiotics groups respectively, compared with the immediate antibiotics group.

Writing in *The BMJ*, Paul Aylin, professor of epidemiology and public health at Imperial, said: "This study has shown that patients aged older than 65 years with a diagnosis of urinary tract infection are at increased risk of bloodstream infection and death within 60 days when antibiotic treatment was either not prescribed or deferred.

"Our findings suggest that GPs consider early prescription of antibiotics for this vulnerable group of older adults in view of their increased susceptibility to sepsis after UTI, and despite a growing pressure to reduce inappropriate antibiotic use."

Public health experts are concerned about the rise of antibiotic resistance, with Dame Sally Davies, the Chief Medical Officer, warning that medicine could revert to the point where even a common infection could kill.

In a linked editorial, Alastair Hay, at the University of Bristol, said: "Prompt treatment should be offered to older patients, men ... and those living in areas of greater socioeconomic deprivation who are at the highest risk of bloodstream infections."