# Chronic UTIs and test flaws overlooked in ‘archaic’ guidelines: urologists

Definitions for positive culture have not been updated since the 1950s, Dr Ashani Couchman says.

Sarah Simpkins



Dr Ashani Couchman.

UTI guidance is outdated and needs an overhaul to acknowledge chronic UTIs and the limits of culture assessments, urologists say.

Adelaide urological surgeon Dr Ashani Couchman says diagnosis criteria based on white cell counts and a bacteria count of $10^5$ CFU/mL are “fixed and archaic”.

She says the definitions for a positive culture had been established in the 1950s based on “a study of about 70 people who had

a kidney infection at the time".

"That has not changed since, which is extraordinary," says Dr Couchman, a Urological Society of Australia and New Zealand (USANZ) board member.

UNSANZ is reworking its position on Australian UTI clinical guidelines, which differ between states.

"If you follow all those guidelines, not everyone who presents with what seems like a UTI has, by the definition, a UTI," Dr Couchman says.

"So the diagnosis can sometimes be wrong, and treatment can sometimes be wrong or not long enough."

She said standards for testing, including dipstick tests and culture assessments of midstream urine, were "flawed".

Agar plates for culture assessments used a growth medium that favoured certain bacteria, she said.

She said showed infection could involve multiple bacteria, but doctors could be missing a range of them.

"It is like providing the right fertiliser … If you do not provide a broad-based fertiliser, you are going to kill off some seedlings that you never knew existed."

"You have skewed what you are growing, so you are skewing your findings; you are diluting your findings.

"We need an acknowledgement or clear comment that says: 'This is what we are doing, but these are the limitations'."

She added that traces of epithelial or skin cells in urine samples were deemed contamination under current guidelines.

"But there is more evidence that suggests certain sorts of squamous cells actually get sloughed all the way down from the kidney.

"That does not necessarily mean it is contaminating your sample; it is just a demonstration of your sample."

Dr Couchman and USANZ president Professor Helen O'Connell have both argued for new guidelines to formally recognise chronic UTIs.

In the UK, the NHS has already updated its public advice to recognise chronic UTIs, saying some patients have UTI symptoms that "do not go away" — possibly caused by bacteria embedding in the bladder lining.

Its advice states that testing does not always detect chronic infections, yet they can have a "big impact" on quality of life.

"We think it exists in patients who may have persistent symptoms of UTIs, with or without a positive culture," said Dr Couchman.

"But they are symptomatically very severely bothered.

"Historically, they have been diagnosed with all sorts: bladder pain syndrome, interstitial cystitis, overactive bladder.

"I do not think we have the evidence to say this is an exclusive diagnosis. I do not know if these things go hand in hand, exist next to each other or feed into each other.

"But we know this sort of patient presentation exists."

The UK guidelines did not address treatment options, Dr Couchman said.

She said there could be role for long-term antibiotics, but without guidelines, it was a case-by-case decision based on the patient, response to other treatments and culture results.

Information around chronic UTIs was "very confusing", she said.

"You can see why people are not quite appropriately diagnosed, are incompletely treated or feel that their symptoms are not