

duration of 5.6 days, in the ibuprofen group. These women also had higher scores for impairment of activity, e.g. restriction of work or regular activities.

Complication rates were higher, with five cases of pyelonephritis in the ibuprofen group compared with one in the fosfomycin group ($P = 0.12$).

Both groups had similar rates of recurrent UTI.

Two-thirds of the women in the ibuprofen group recovered without antibiotic treatment. However, within a month, 34% of the women in the ibuprofen group received antibiotics for persistent or worsening symptoms compared with 14% in the fosfomycin group.

Although this strategy appears to be successful in reducing antibiotic prescribing, it comes at a cost to the women involved, of more significant symptoms, for a longer duration, with greater impact on their lives and a higher risk of upper urinary tract complications.

Thus, it is difficult to conclude that this approach should be recommended for all women with uncomplicated UTI in primary care.

Most GPs would feel that women presenting with a simple UTI need an antibiotic, and the vast majority of women will leave their appointment with a prescription. Indeed, it is estimated that 25% of antibiotic prescriptions in primary care are for uncomplicated UTI.

The findings from this study clearly suggest that treatment with an NSAID is an option for some patients, perhaps those with less intrusive symptoms, or who have expressed a strong desire to avoid antibiotics where possible.

However, trials in primary care are still needed to look at this strategy in more detail, to assist GPs in deciding the best treatment strategy for individual patients.

DR JONATHAN REES

Gagyor I, Bleidorn J, Kochen MM et al. Ibuprofen versus fosfomycin for uncomplicated urinary tract infection in women: randomised controlled trial. *BMJ* 2015;351:h6544

Paediatrics

Survivors of childhood cancer at increased risk of autoimmune diseases

A Scandinavian study of survivors of childhood cancer has found a significantly higher incidence of a range of autoimmune disorders compared with matched controls.

Using Denmark, Iceland and Sweden's comprehensive national cancer and hospital episode recording registries 20,361 survivors of cancer diagnosed before the age of 20 were identified. These individuals were matched with 125,794 controls selected from national population registers. The median follow-up was 15 years for survivors and 19 years for controls (range 0-42 years for both).

Just over a third (34.2%) of cancer survivors had a history of leukaemia or lymphoma and a quarter (24.8%) CNS neoplasms. The figures for renal, bone, soft tissue tumours and retinoblastoma were: 4.2%, 4.9%, 6.0% and 2.4% respectively.

Overall, cancer survivors were more likely than controls to develop an autoimmune disease. The standardised hospitalisation rate ratio (SHRR) was 1.4 (95% CI: 1.3-1.5). This equated to an absolute excess risk of 67 per 100,000 person-years compared with controls. The ratio was highest within five years of diagnosis 2.5 (95% CI: 2.1-3.0) and decreased steadily with time but still remained slightly, but statistically significantly, raised 20-29 years after diagnosis.

The specific disorders seen significantly more commonly in

survivors included:

- Autoimmune haemolytic anaemia (SHRR = 16.2)
- Addison's disease (13.8)
- Polyarteritis nodosa (5.8)
- Chronic rheumatic heart disease (4.5)
- Idiopathic thrombocytopenic purpura (3.4)
- Hashimoto's thyroiditis (3.0)
- Sjögren's syndrome (2.0)
- Type 1 diabetes (1.6)

The cancers most associated significantly with subsequent autoimmune disorder were:

- Leukaemia (SHRR = 1.6)
- Hodgkin's lymphoma (1.6)
- Renal tumours (1.6)
- CNS neoplasms (1.4)

The results of treatment for a range of paediatric cancers has improved dramatically over recent years with overall five-year survival rates of 70-82% across Europe between 2005 and 2007.¹ However, these gains have not been without cost.

Autoimmune disorders do appear to occur more commonly in survivors of childhood cancer especially in the first few years after diagnosis.

The absolute excess risk of autoimmune disease does not appear to be large but the link is worth bearing in mind during consultations with survivors of childhood cancer.

'Cure is no longer a sufficient goal in childhood cancer care. As the vast majority of these patients survive, attention must be paid to their long-term quality of life and health challenges,' the study authors conclude.

DR CHRIS BARCLAY

Holmqvist AS, Olsen JH, Mellekjaer L et al. Autoimmune diseases in adult life after childhood cancer in Scandinavia (ALiCCS). *Ann Rheum Dis* 2015;0:1-8. doi:10.1136/annrheumdis-2015-207659

REFERENCE

1 Gatta G, Botta L, Rossi S. Childhood cancer survival in Europe 1999-2007: results of EURO-CARE-5: a population-based study. *Lancet Oncol* 2014;15(11):35-47

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