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Guideline (Executive summary)

British Society for Rheumatology and British Health Professionals in Rheumatology Guideline for the Management of Gout

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Key words: Gout, Guidelines, Non-pharmacological treatment, Pharmacological treatment.

Scope and purpose of the guideline

Gout is a common disease both in primary care and hospital practice [1].

Although drug therapy for gout has become a paradigm for the effective management and prevention of an acute and potentially chronic rheumatic disease, many of the recommendations for treatment are based on expert consensus rather than research evidence and audits of practice suggest that treatment is very variable.

Evidence-based guidelines are needed at the present time:

- to provide a framework for improving standards of care.
- to assess the potential of new therapies such as Coxibs [2], urate oxidases [3] and novel xanthine oxidase inhibitors [4] currently in clinical development;
- to provide recommendations for alcohol consumption, diet and lifestyle modification in response to frequently asked questions by patients (www.ukgoutsociety.org) in the light of recent epidemiological studies linking gout with alcohol consumption [5], dietary protein intake [6] and features of the metabolic syndrome, which are assuming epidemic proportions [7];
- to define recommendations for treating secondary atypical gout, and small subgroups of patients with severe recurrent gout associated with renal insufficiency, organ transplantation, allopurinol hypersensitivity or primary purine overproduction.

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The aim has been to develop concise, patient-focussed, evidence-based recommendations for the management of gout for doctors and allied heath professionals in primary care and hospital practice in the UK, which will also provide a useful resource for patients.

Recommendations for the diagnosis and investigation of gout [8] are not addressed.

Guideline for the management of gout

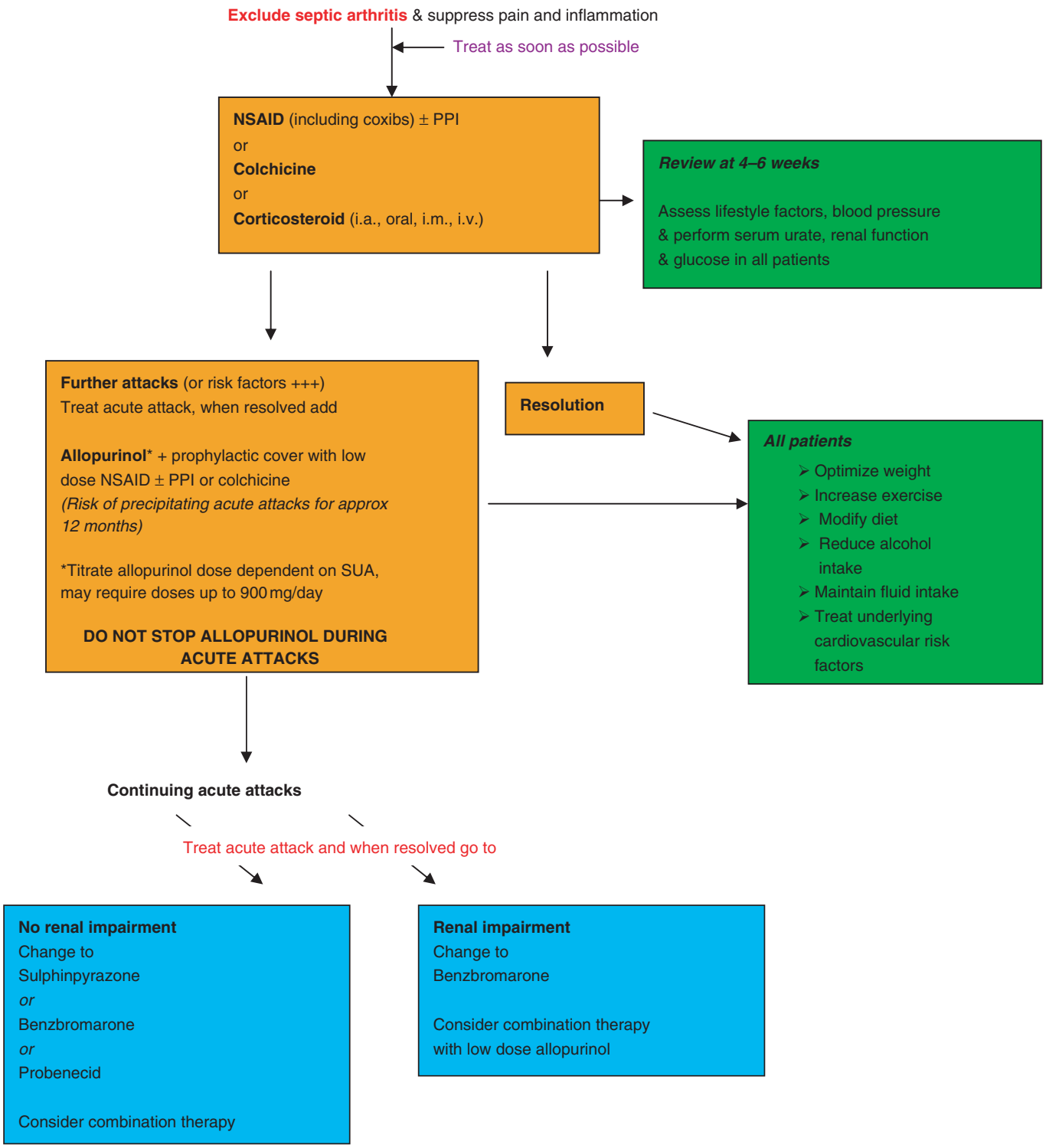
This is a short summary of the guideline. The full guideline can be accessed at Rheumatology Online (www.rheumatology.oxfordjournals.org).

The management pathways proposed are summarized in the accompanying flowchart. The strength recommendations, based on levels of evidence, are graded A–C [9], and the recommendations are divided into three sections:

Management of acute gout

(1) Affected joints should be rested (C) and analgesic, anti-inflammatory drug therapy commenced immediately, and continued for 1–2 weeks (A).
(2) Fast-acting oral NSAIDs at maximum doses are the drugs of choice when there are no contraindications (A).
(3) In patients with increased risk of peptic ulcers, bleeds or perforations, co-prescription of gastro-protective agents should follow standard guidelines for the use of NSAIDs and Coxibs (A).
(4) Colchicine can be an effective alternative but is slower to work than NSAIDs (A). In order to diminish the risks of adverse effects (especially diarrhoea) it should be used in doses of 500 μg bd–qds (C).
(5) Allopurinol should not be commenced during an acute attack (B) but in patients already established on allopurinol, it should be continued and the acute attack should be treated conventionally (A).
(6) Opiate analgesics can be used as adjuncts (C).
(7) Intra-articular corticosteroids are highly effective in acute gouty monoarthritis (B) and i.a, oral, i.m or i.v

GOUT: MANAGEMENT PATHWAY



corticosteroids can be effective in patients unable to tolerate NSAIDs, and in patients refractory to other treatments (A).
(8) If diuretc drugs are being used to treat hypertension, an alternative antihypertensive agent should be considered, but in patients with heart failure, diuretic therapy should not be discontinued (C).

Recommendations for diet, lifestyle modification and non-pharmacological modalities of therapy

(1) In overweight patients dietary modification to achieve *ideal* body weight should be attempted (B), but 'crash dieting' (B) and high protein/low carbohydrate (Atkins-type) diets (C) should be avoided.
(2) Inclusion of skimmed milk and/or low fat yoghurt, soy beans and vegetable sources of protein and cherries, in the diet should be encouraged (B).
(3) Intake of high purine foods and red meat should be restricted (B). Liver, kidneys, shellfish and yeast extracts should be avoided (B), and overall protein intake should be restricted (C).
(4) Patients with gout and a history of urolithiasis should be encouraged to drink >21 of water daily (B) and avoid dehydration (C). Alkalinization of the urine with potassium citrate (60 mEq/day) should be considered in recurrent stone formers (B).
(5) Alcohol consumption should be restricted to <21 units/week (men) and 14 units/week (women) (B), and patients should be encouraged to have at least 3 alcohol-free days per week (C). Beer, stout, port and similar fortified wines are best avoided (C).
(6) Patients should be discouraged from undertaking trials of herbal remedies without medical consultation (C).
(7) Affected joints should be elevated and exposed in a cool environment (C). 'Bed cages' (C) and ice packs (B) can be effective adjuncts to therapy.
(8) Trauma to joints (B) and intense physical exercise (B) should be avoided but moderate physical exercise encouraged (B).

Management of recurrent, intercritical and chronic gout

(1) The plasma urate should be maintained below, 300 μmol/l (C).
(2) In uncomplicated gout uric acid lowering drug therapy should be started if a second attack, or further attacks occur within 1 yr (B).
(3) Uric acid lowering drug therapy should also be offered to patients with tophi (C), patients with renal insufficiency (B) patients with uric acid stones and gout (B) and to patients who need to continue treatment with diuretics (B).
(4) Commencement of uric acid-lowering drug therapy should be delayed until 1–2 weeks after inflammation has settled (C).
(5) Initial long-term treatment of recurrent uncomplicated gout normally should be with allopurinol starting in a dose of 50–100 mg/day and increasing by 50–100 mg increments every few weeks, adjusted if necessary for renal function, until the therapeutic target (SUA <300 μmol/l) is reached (maximum dose 900 mg) (B).
(6) Uricosuric agents can be used as second-line drugs in patients who are under-excretors of uric acid and in those resistant to, or intolerant of, allopurinol (B). The preferred drugs are sulphinpyrazone (200–800 mg/day) in patients with normal renal function or benzbromarone (50–200 mg/day) in patients with mild/moderate renal insufficiency (B).
(7) Colchicine 0.5 mg bd should be co-prescribed following initiation of treatment with allopurinol or uricosuric drugs, and continued for up to 6 months (A). In patients who cannot tolerate colchicine, an NSAID or Coxib can be substituted provided that there are no contraindications, but the duration of NSAID or Coxib cover should be limited to 6 weeks (C).
(8) Aspirin in low doses (75–150 mg/day) has insignificant effects on the plasma urate, and should be used as required for cardiovascular prophylaxis (B). However, aspirin in analgesic doses (600–2400 mg/day) interferes with uric acid excretion and should be avoided (B).

The full guideline also contains recommendations for the use of uricolytic agents and combined therapy with allopurinol and uricosuric drugs; as well as for the management of special groups of patients with chronic gout.

The guideline has been developed as a National Guideline, acceptable for use throughout the NHS in the UK. If followed and implemented, these guidelines will provide an opportunity to improve the quality of care for patients with gout in both hospital and community settings.

Recommendations for audit

Assess the impact of the guideline on:

(1) The frequency and duration of gout flares.
(2) The achievement of target reduction in plasma urate levels.
(3) Lifestyle modification (weight reduction, alcohol intake and dietary adjustment).
(4) The assessment and treatment of co-morbid disorders (diabetes mellitus, hypertension, and cardiovascular risk factors).
(5) The time to accurate diagnosis and treatment of gout in primary and hospital care settings.
(6) Documentation of all of the above.

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