Presentation & Management of Rheumatology Patients in the Acute Medical Unit

What did Rheumatology/Lifestyle Medicine Do for Us?

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The Sir Jules Thorn CHARITABLE TRUST

VERSUS ARTHRITIS

group consultations

Northumbria Healthcare NHS Foundation Trust

NHS

British Society of lifestyle medicine

MRC Medical Research Council

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Newcastle University

Northumbria University NEWCASTLE

Southern Cross University

CIMA

Declaration for Professor Fraser Birrell

I have the following financial interest or relationship/s to disclose with regard to the subject matter of this presentation:

- Research funding from:
  - NIHR Newcastle Biomedical Research Centre
  - MRC- Versus Arthritis Centre for Integrated Research into Musculoskeletal Ageing
  - NIHR HTA for PROP OA trial
  - Sir Jules Thorn Trust & NIHR CRN for Nation Group Consultation Evaluation
  - Northern Accelerator Future Founders Programme
- Editor-in-Chief of Lifestyle Medicine (Wiley gold open access journal)
  - Official journal of the British Society of Lifestyle Medicine, Australasian Society of Lifestyle Medicine, European Lifestyle Medicine Council, Korean College of Lifestyle Medicine & Sri Lankan Society of Lifestyle Medicine
- I have no financial interests or relationships to disclose with regard to the subject matter of this presentation: no stock, advisory boards or consulting fees

Agenda/Learning Outcomes

By the end of this session, attendees will:

- Know core Rheumatology conditions presenting to AMU
  - Acute vasculitis (including Giant Cell Arteritis)
  - Septic Arthritis
  - Gout
  - Osteoarthritis & other inflammatory arthritides
  - Atlantoaxial subluxation
- Understand the key management options for these and wider implications:
  - Gastrointestinal bleed: risk & reporting
  - Disease Modifying Drugs and their toxicities
  - Biologic Therapies
  - Lifestyle Medicine
- Appreciate future opportunities to both deliver & manage emergency care

Which Clinical Features Suggest Vasculitis?

- Sudden visual loss
- Nephritic syndrome
- Photosensitive rash
- Raised ESR with normal CRP
- Mononeuritis multiplex
- All of the above

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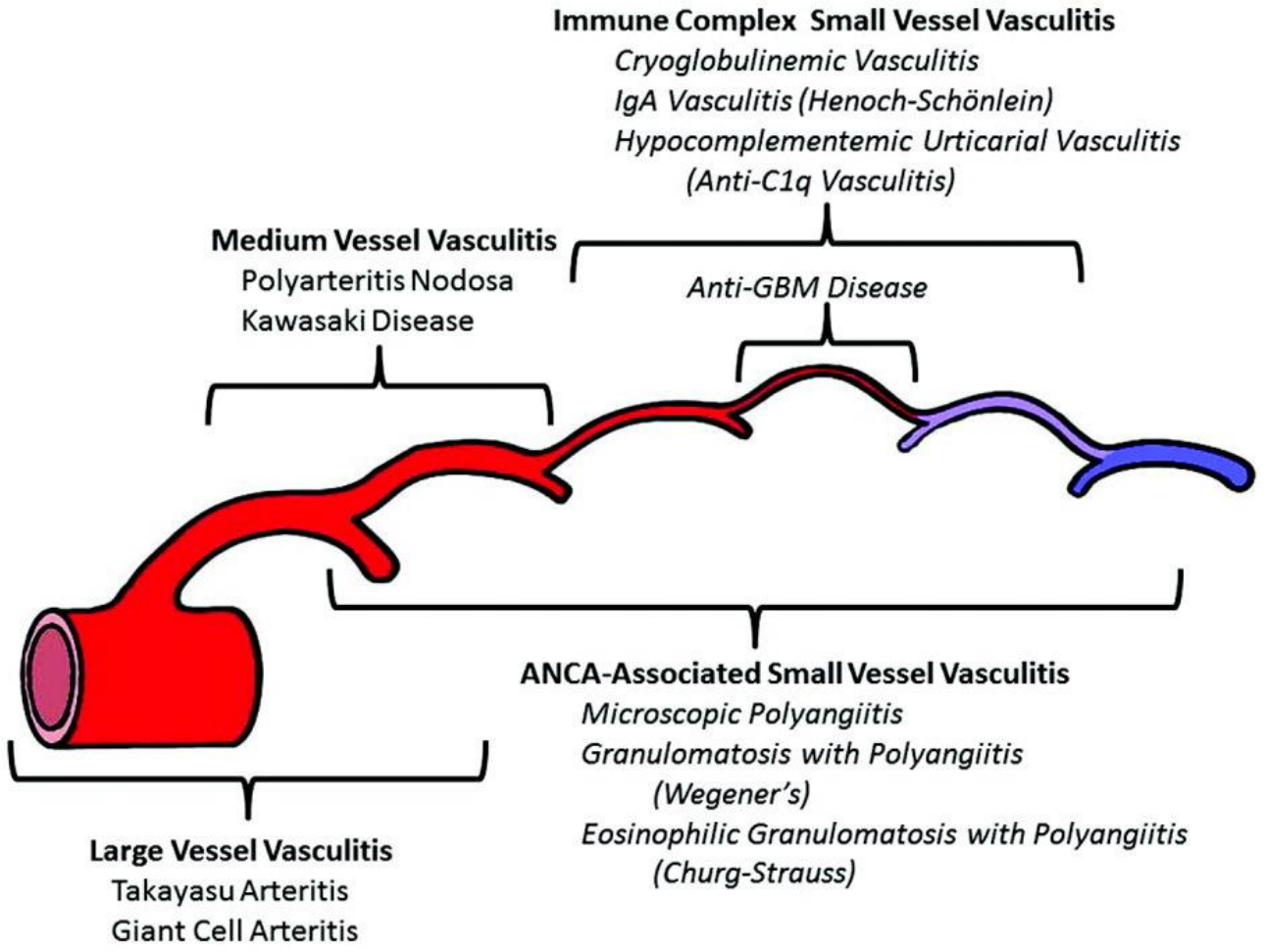
2012 Revised International Chapel Hill Consensus Conference Nomenclature of Vasculitides



Arthritis & Rheumatism, Volume: 65(1):1-11,
First published: 08 October 2012, DOI: (10.1002/art.37715)

Giant Cell Arteritis- Phone Rheumatology

American College of Rheumatology Criteria (3 out of 5 criteria)

- Age >50
- New onset localised headache
- Temporal artery tenderness
- ESR >50 (commensurate CRP)
- Positive histology

Dasgupta (RCP), 2010

Hellmich et al (EULAR), 2020

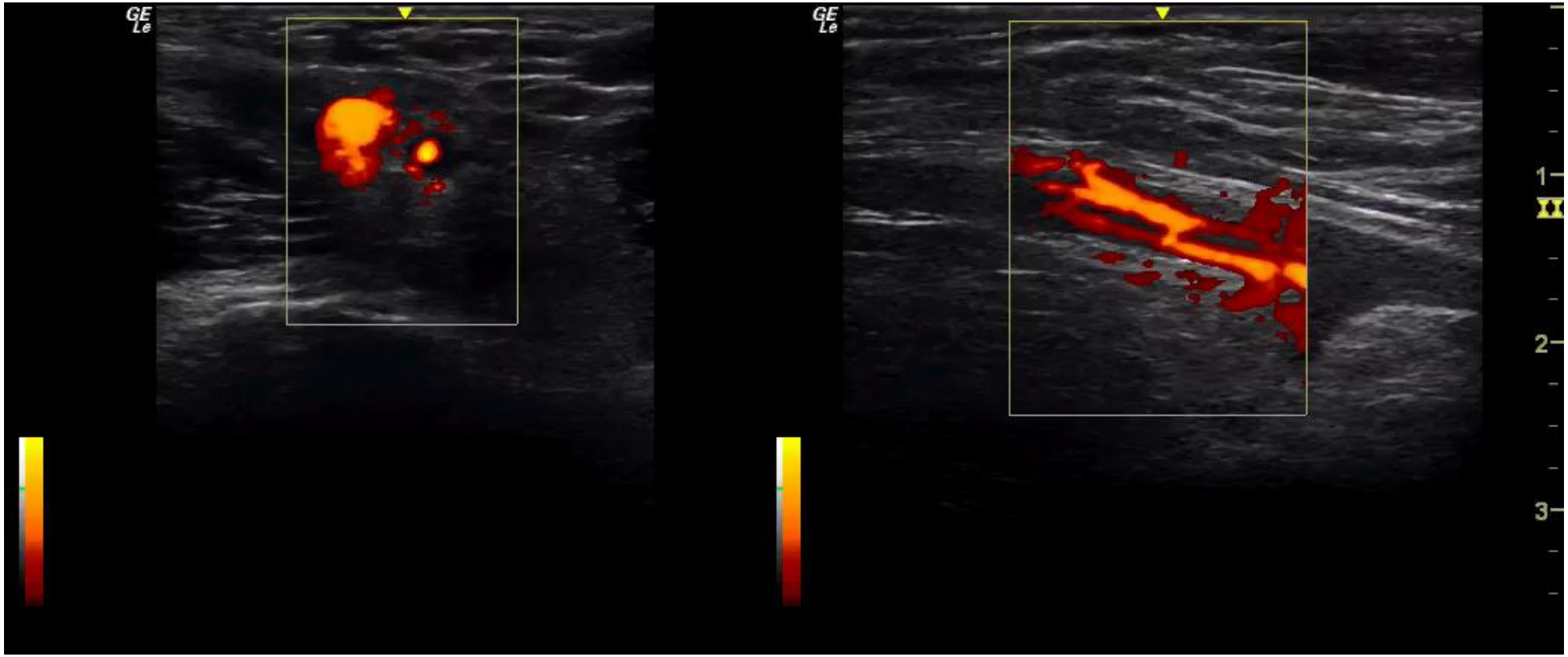
Laskou Criteria (Southend Score)

	0	1	2	3
• **Age**	<50	50-60	61-65	>65
• **Sex**		Male	Female	
• **Duration**	>24/52	12-24/52	6-12/52	<6/52
• **CRP***/mg/L*	0-5	6-10	11-25	>25
• **Symptoms** systemic		Headache	Polymyalgia	Jaw claudn/combo
• **Signs**		TA tender	TA thickened	Pulse loss

- **Alternative diagnosis**: infection, cancer, head & neck pathology **score-3**
- **>9 HIGH RISK-** likely to need MSUS +/- biopsy**:** start Prednisolone 40mg if cannot reach on call Rheumatolgist of the Day (e.g. out of hours)

Laskou et al, 2019

Temporal Artery Ultrasound



AMU Case 1

53-year-old lollipop lady

4/52 D & V

Sweats and rigors

2/52 Pain left leg

Radiation to abdomen

Antalgic gait 50m

2/7 Left shoulder pain + weakness

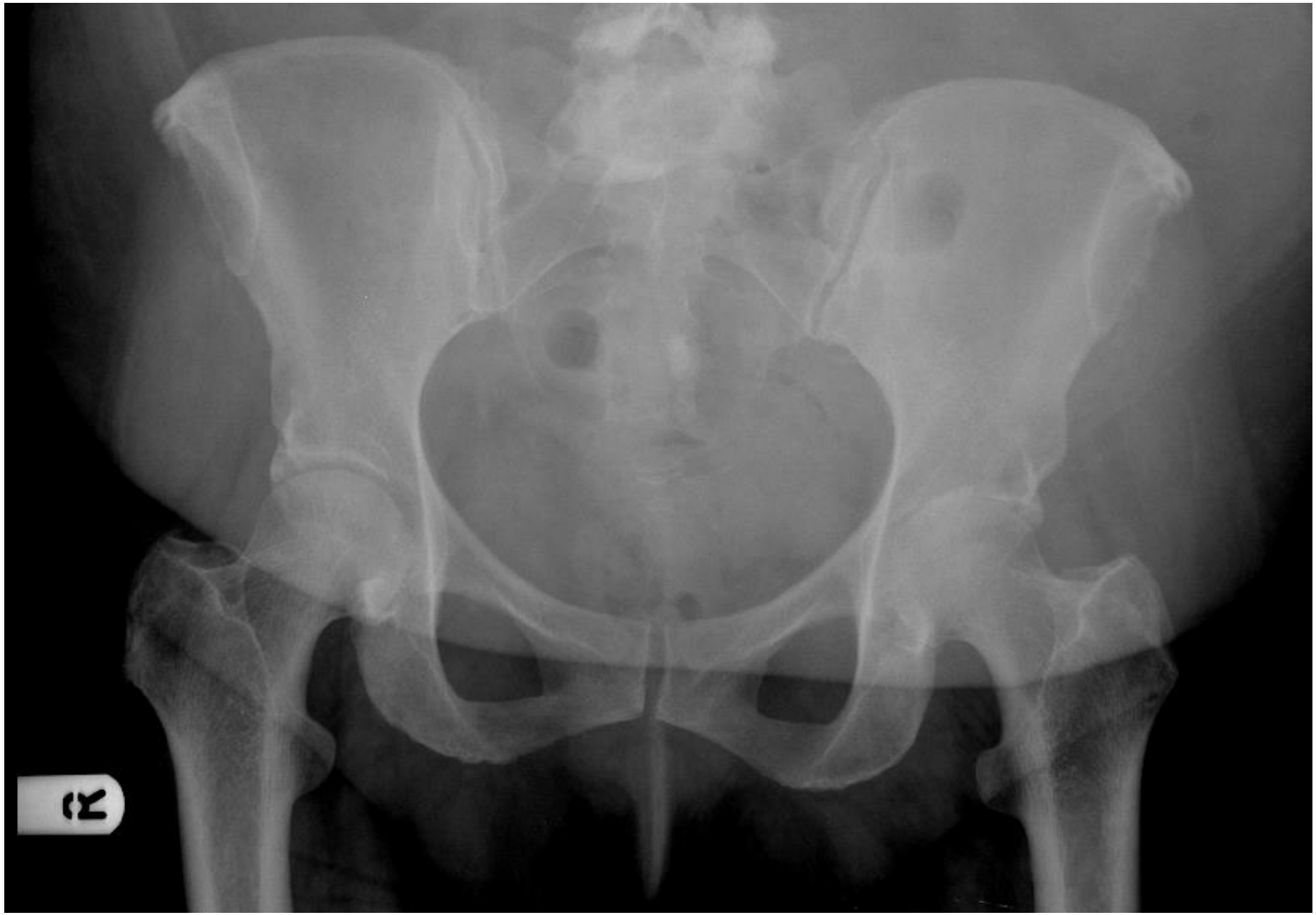
Past Medical History

- No PMH joint disease
- Gallstones: cholecystectomy 1995
- Carpal tunnel decompression 1997
- Hypertension 2001-
- DH
    - Bendroflumethiazide
    - Dihydrocodeine
    - Diclofenac
- SH lives with husband; non-smoker; Etoh 12 units
- Unable to work since February

On Examination

- Sweaty and tremulous
- Obese (Class I) BMI 32.7 *+21.2kg over ideal weight*
- 152/70 HR=132 SATS=92% 37.9°C
- Left hip
  - Tender joint margin
  - No straight leg raise
  - 60° passive flexion 30° passive abduction
  - Internal rotation limited by pain
- Left shoulder
  - Warm + swollen
  - Capsular pattern of ↓ROM
- ↓ Plantar reflex

Admission X-ray



What is the Most Likely Diagnosis?

- Gout
- Reactive arthritis
- Septic arthritis
- Pseudogout
- Tuberculosis

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Initial management

- Glenohumeral aspiration
  - 1ml blood-stained aspirate
  - Culture and sensitivity
- USS hip
  - Effusion
  - Refused aspiration

Micro-organism

- Gram +ve cocci
  - Iv flucloxacillin
  - Iv ciprofloxacin
- Alpha haemolytic streptococcus
  - Iv amoxicillin
- Total 6 weeks antibiotics

AMU Case 2

57-year-old HGV driver: car transporter

3/7	Right knee- red, hot, swollen, painful
	EMS++ 3h
	Weight-bearing difficult
6 years	Episodes of pain & swelling
	Left or right 1st MTP
	Lasts 2-5 days
	Improved by ibuprofen

No FH Gout/Psoriasis

PMH IDDM 2022- CVA post circulation stroke Sept 2023

On Examination

T37.8C P100 BP 150/78

Overweight BMI 26.2 +3.9kg over ideal weight

Red, hot, swollen, tender knee- held in fixed flexion, exquisitely painful

No other synovitis

What is the single most important investigation?

- X-ray of affected joint
- Bloods for urate FBC U&E LFT CRP ESR
- Joint aspiration
- Musculoskeletal Ultrasound
- Dual energy CT

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What is the single most important investigation?

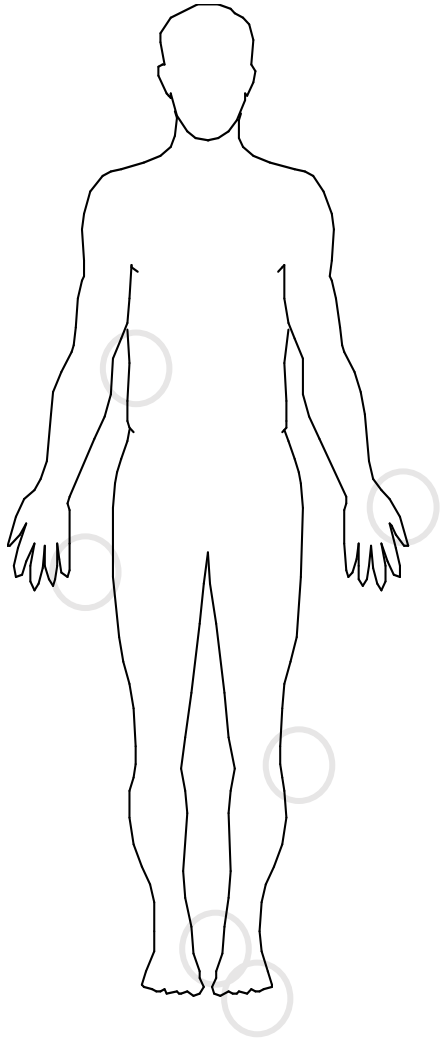
- X-ray of affected joint
  - Not sensitive, but useful if possible sepsis, as if CXR & MSU
- Bloods for urate FBC U&E LFT CRP ESR
  - Remember urate goes down acute attack: may be normal not high
- **Joint aspiration:**
  - **Sent for polarised light microscopy, gram stain & culture**
- Musculoskeletal Ultrasound
  - Characteristic findings- double contour sign, but not necessary
- Dual energy CT
  - Evolving evidence base- more widely used in USA

Slido Answer Slide

Gout Clinical Features

- ♂>♀
- Acute attacks
  - Exquisitely painful
  - 1st MTP ‘podagra’
  - Other peripheral joints *Why?*
  - Tophi *Why?*
- If untreated:
  - Erosive arthritis
  - Renal impairment

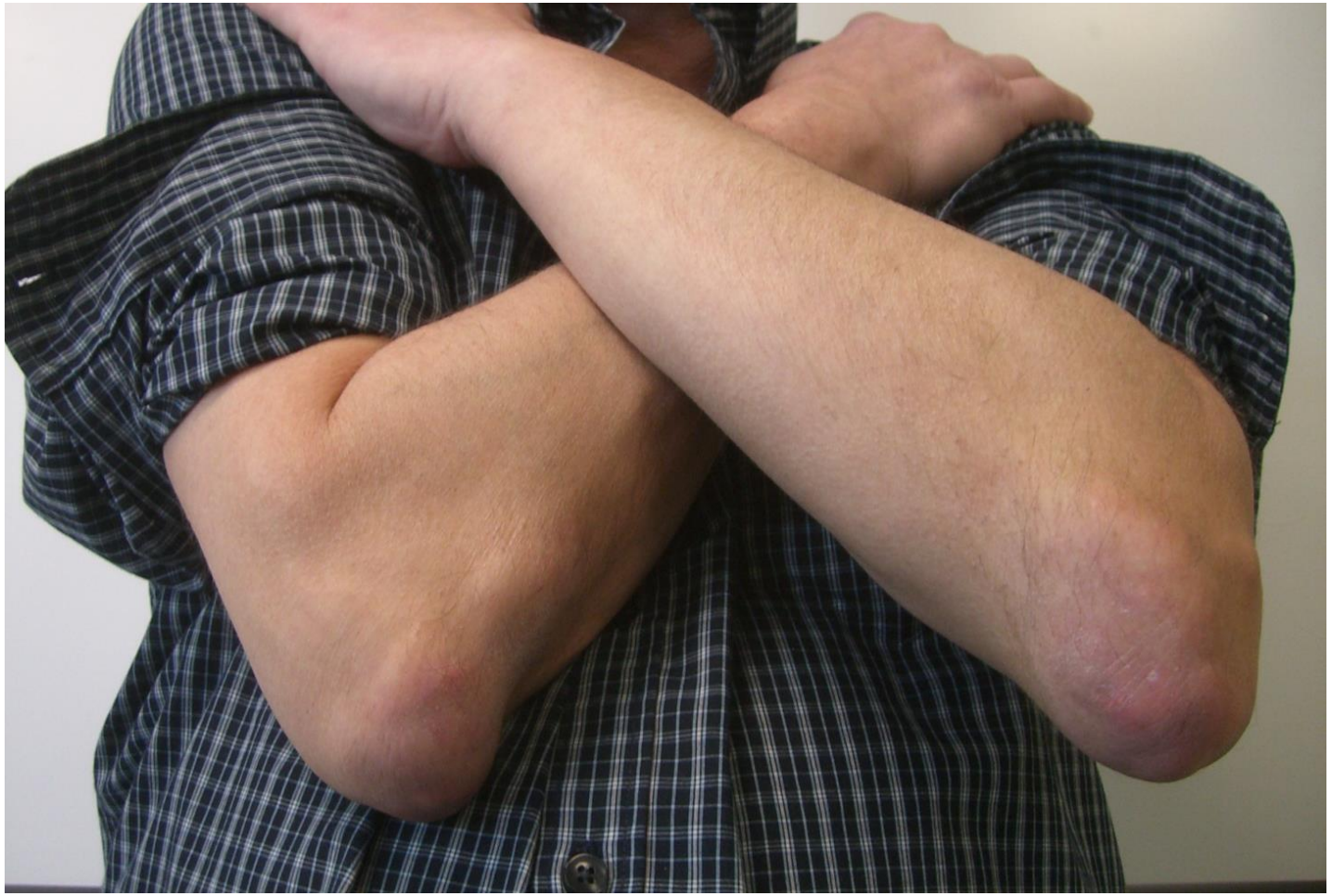
Common sites of acute attacks



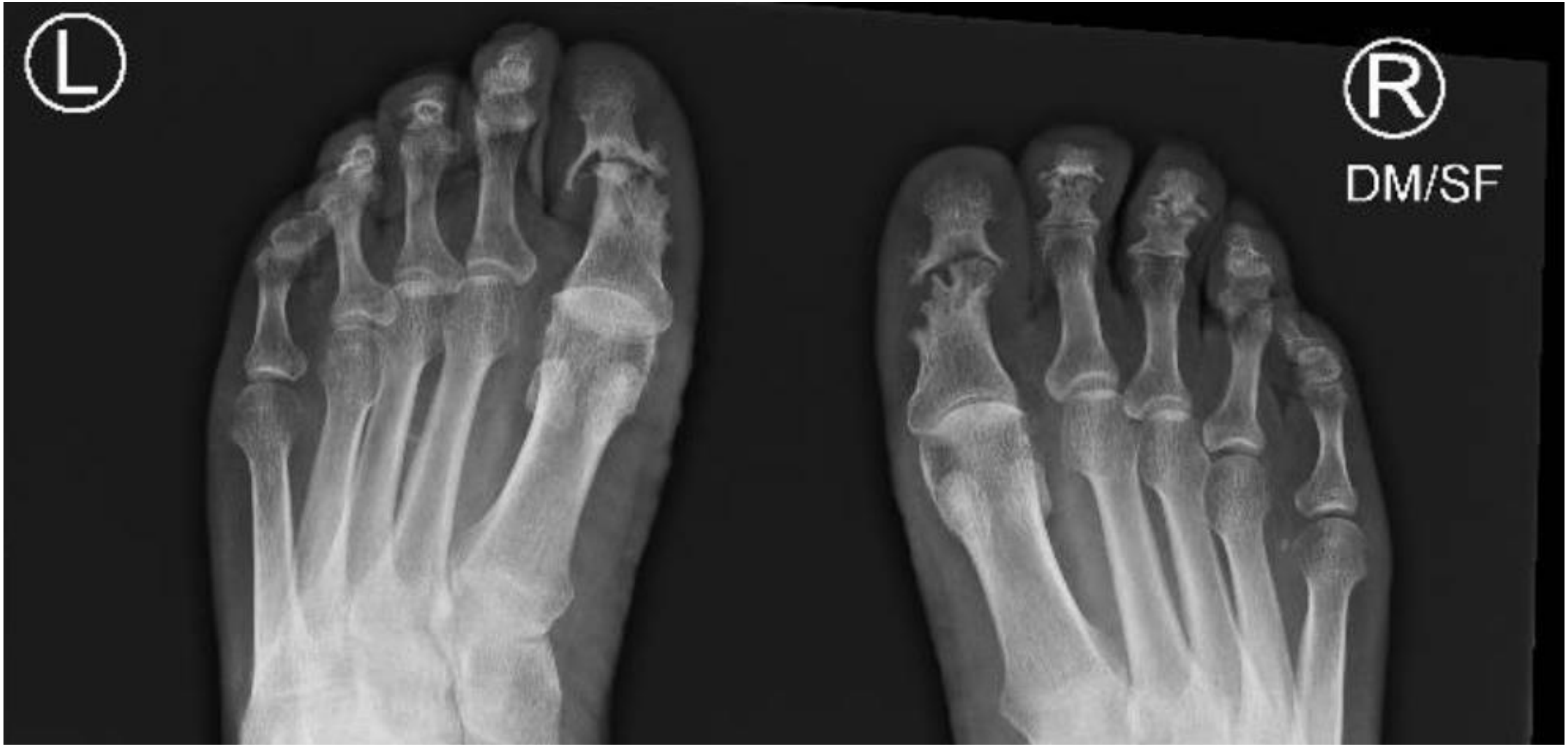
- ***Common order of progression in untreated primary gout:***
  - Metatarso-phalangeal joint of the first toe (~50% of initial attacks; known as podagra)
  - Midfoot, ankle, knee
  - Wrist
  - Finger joints (in the elderly and people who have had primary gout for a long period of time)
  - Olecranon bursae (elbow)
- ***Usually monoarticular (~90% of first attacks) but can be polyarticular in higher-risk patients (e.g., alcoholics, postmenopausal women) and as disease progresses***

Harris MD, et al. Am Fam Physician 1999; 59(4):925-934.

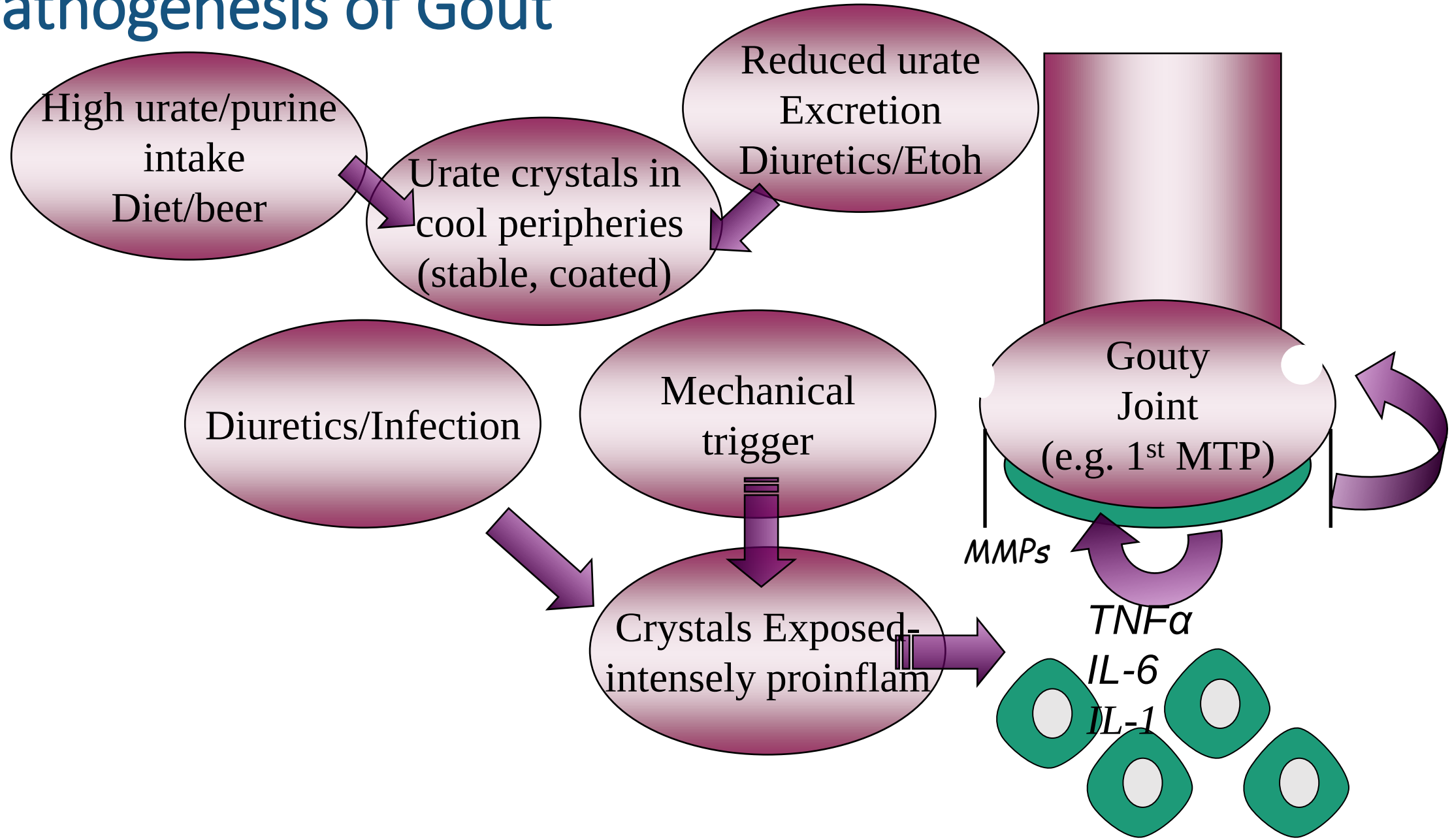
Tophi- On Cool Peripheries



Gouty Erosions- Classically Juxta-articular



Pathogenesis of Gout



Management of gout

NICE National Institute for Health and Care Excellence

Managing gout flares

Offer an NSAID, colchicine or short course of oral corticosteroid
- Take into account comorbidities, co-prescriptions and preferences
- Consider adding a PPI with NSAID

If NSAIDs or colchicine unsuitable or ineffective
- Consider intra-articular or intramuscular corticosteroid injection

Do not offer an IL-1 inhibitor unless NSAIDs, colchicine and corticosteroids are unsuitable or ineffective.
- Refer to rheumatology before prescribing

Advise that applying ice packs to the affected joint (cold therapy) in addition to taking prescribed medicine may help alleviate pain

Consider a follow-up appointment after a gout flare has settled to:
- measure serum urate level
- provide information
- assess lifestyle and comorbidities
- review medications and discuss risks and benefits of long-term ULT

Information and support

Provide tailored information at diagnosis and during follow-up appointments

Explain:
- causes, and symptoms and signs, of gout
- that the disease progresses without intervention because high levels of urate in the blood will lead to the formation of new urate crystals
- any risk factors for gout they have, including genetics, excess body weight or obesity, medicines they are taking, and comorbidities such as CKD or hypertension
- how to manage gout flares and the treatment options available
- that gout is a lifelong condition that will benefit from long-term ULT to eliminate urate crystals and prevent flares, shrink tophi and prevent long-term joint damage
- where to find other sources of information and support such as local support groups, online forums and national charities

Diet and lifestyle

Explain that there is not enough evidence to show that any specific diet prevents flares or lowers serum urate levels

Advise people with gout:
- to follow a healthy, balanced diet
- that excess body weight or obesity, or excessive alcohol consumption, may exacerbate gout flares and symptoms

See the visual summary on long-term management of gout with ULTs

This is a summary of the advice on management of gout in NICE's guideline on gout: diagnosis and management.
CKD, chronic kidney disease; GFR, glomerular filtration rate; IL-1, interleukin-1; NSAID, non-steroidal anti-inflammatory drug; PPI, proton pump inhibitor; ULT, urate-lowering therapy

In June 2022, this was an off-label use of NSAIDs and corticosteroids. See NICE's information on prescribing medicines.

Published: June 2022

Acute Treatment

- Acute attack: colchicine 500mcg bd/tds/full dose NSAIDs+PPI
- Rest, ice, compression, elevation
- Colchicine, NSAIDs
- Corticosteroid injection
- iv Uricase
  - Not available UK
- Anti IL-1β mab-
  - *Anakinra & canakinumab; off label*

Lifestyle changes Recommended in gout

- **Diet**
  - Reduce purine intake (reduce red meat, avoid liver, kidneys, shellfish and pulses)
  - Reduce fructose-containing drinks
  - Include skimmed milk, low fat yoghurt, vegetable protein and cherries every day
- **Decrease alcohol consumption (especially beer)**
- **Weight loss**
  - 1 kg/month (avoid crash diets)
  - Avoid high protein diets
- **Patients with urolithiasis should be encouraged to drink >2 litres of water/day**
- **Moderate exercise**

Lifestyle changes have only modest effects on sUA (e.g., 10-15% reduction with a low-purine diet), hence drug therapy is usually required

Long-term management of gout with ULTs

NICE National Institute for Health and Care Excellence

Explain that:
- disease progresses without intervention because high levels of urate in the blood form new urate crystals
- gout is a lifelong condition that will benefit from long-term ULT

Ensure people understand that ULT is:
- usually continued after the target serum urate level is reached
- typically a lifelong treatment

Consider rheumatology referral if:
- diagnosis of gout is uncertain
- treatment is contraindicated, not tolerated or ineffective
- they have CKD stages 3b to 5 (GFR categories G3b to G5)
- they have had an organ transplant

Offer ULT, using a treat-to-target strategy, to people with gout who have:
- multiple or troublesome flares
- CKD stages 3 to 5 (GFR categories G3 to G5)
- diuretic therapy
- tophi
- chronic gouty arthritis

Discuss the option of ULT with people who have had a first or subsequent gout flare who are not within the groups listed above

First-line treatment
Offer either allopurinol or febuxostat
- Offer allopurinol to people with gout who have major cardiovascular disease

Second-line treatment
Consider switching to allopurinol or febuxostat

Treat-to-target strategy:
Start with low-dose ULT and use monthly serum urate levels to guide dose increases, as tolerated, until target serum urate level reached

Start ULT at least 2 to 4 weeks after a gout flare has settled. If flares are more frequent, ULT can be started during a flare

Target serum urate level:
- Aim for below 360 micromol/litre (6 mg/dl)
- Consider below 300 micromol/litre (5 mg/dl) for:
  - tophi or chronic gouty arthritis
  - ongoing frequent flares despite serum urate level below 360 micromol/litre (6 mg/dl)

Consider annual monitoring of serum urate level in people with gout who are continuing ULT after reaching their target serum urate level

Discuss the benefits and risks of taking medicines to prevent gout flares when starting or titrating ULT

For people who choose to have treatment, offer colchicine while target serum urate level is being reached

If colchicine is contraindicated or not suitable, consider a low-dose NSAID or low-dose oral corticosteroid
- Consider adding a PPI, taking into account individual risk factors for adverse events

Do not offer an IL-1 inhibitor unless NSAIDs, colchicine and corticosteroids are unsuitable or ineffective
- Refer to rheumatology before prescribing

This is a summary of the advice on long-term management of gout in NICE's guideline on gout: diagnosis and management.
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Published: June 2022

Prophylactic Treatment

- >1 attack/erosion (!tophi/urate nephropathy)
- Correct underlying causes:
  - High turnover states- psoriasis, tumours
  - Stop diuretics
  - Etoh
- Reduce production
  - Xanthine oxidase inhibitors:
    allopurinol (usually 100mg od initially)/febuxostat 80-120mg od
  - Monthly escalation ↑100mg allopurinol; colchicine cover
- Increase excretion
  - Sulfinpyrazone/Benzbromarone/(Probenecid)
- ***Target- serum urate <300µM***

Guidelines

- **EULAR guidelines advocate maintaining serum urate <360 µmol/l (<6 mg/dl[1 2])**
  - "The therapeutic goal of urate lowering therapy is to promote crystal dissolution and prevent crystal formation. This is achieved by maintaining the serum uric acid below the saturation point for monosodium urate (≤6 mg/dl or ≤0.36 mmol/l)"
- **BSR (UK) guidelines advocate maintaining serum urate <300 µmol/l (<5 mg/dl[3])**

1. *Richette P et al. 2018 updated EULAR evidence-based recommendations for the diagnosis of gout. Ann Rheum Dis 2020;79:31–8*
2. *Richette P et al. 2016 updated EULAR evidence-based recommendations for the management of gout. Ann Rheum Dis 2017;76:29–42*
3. *Hui M et al.; BSR SAG Working Group. BSR and BHPR guideline for the management of gout. Rheumatology 2017;56:1056–9*

Rheumatological diseases (currently) treated with DMARDs

- Rheumatoid arthritis
- Psoriatic arthritis
- Ankylosing spondylitis
- Enteropathic arthritis (Crohns/UC-related)
- Juvenile Inflammatory Arthritis (JIA)
- Connective tissue diseases (SLE, 1^{o} Sjogrens etc)
- Refractory Polymyalgia Rheumatica/GCA
- Others (seronegative arthritis etc)
- PROMOTE study: Methotrexate effective in OA *(in press)*

Concerns with Rheumatology Patients Admitted to AMU

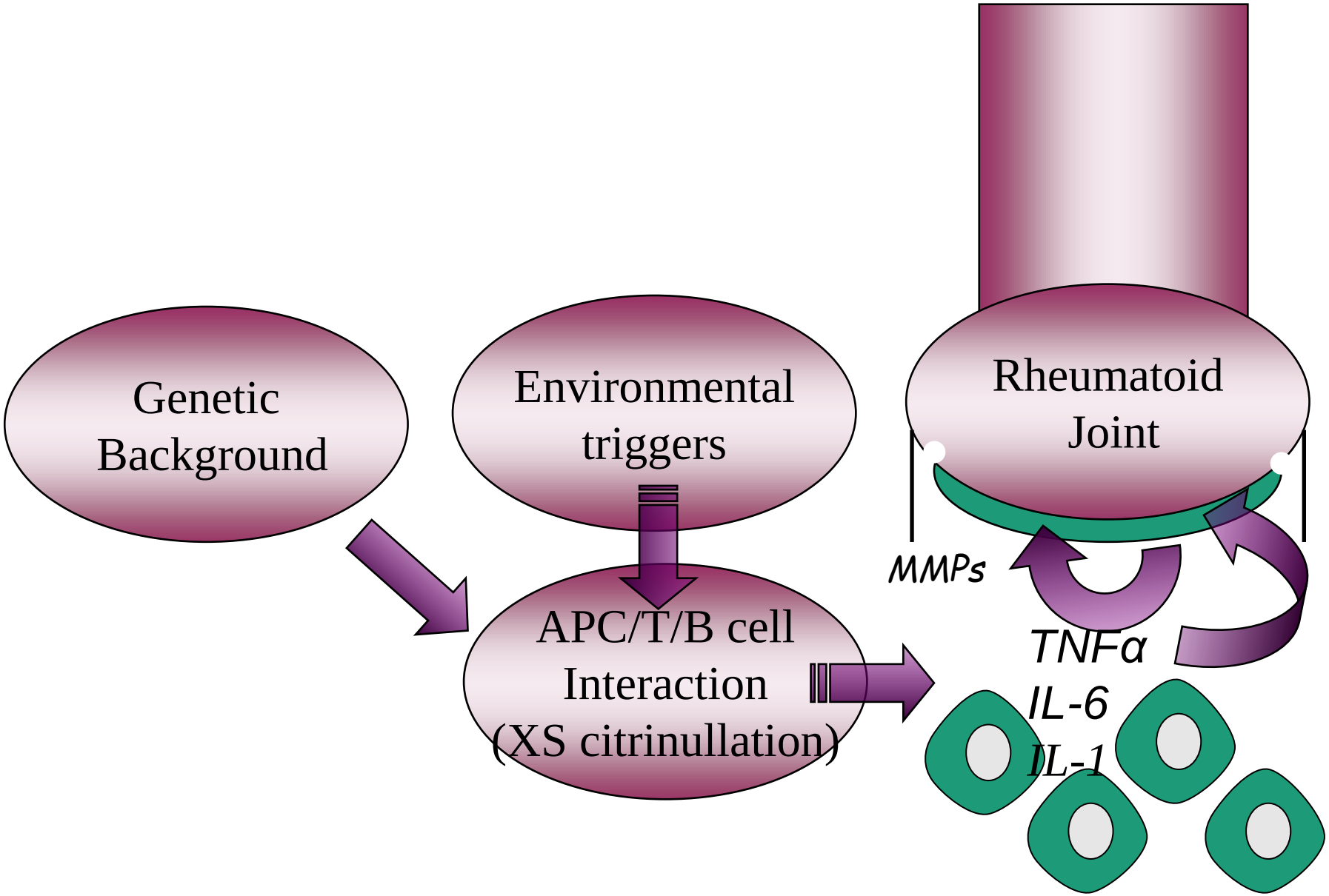
- Immunosuppression from disease +/- drugs
- Atlanto-axial subluxation if chronic Rheumatoid Arthritis
- Hospital-prescribed subcutaneous drugs
- Pneumonitis if methotrexate/leflunomide
- Suspending methotrexate if risk of renal impairment
- All of the above

Slido Slide

Concerns with Rheumatology Patients Admitted to AMU

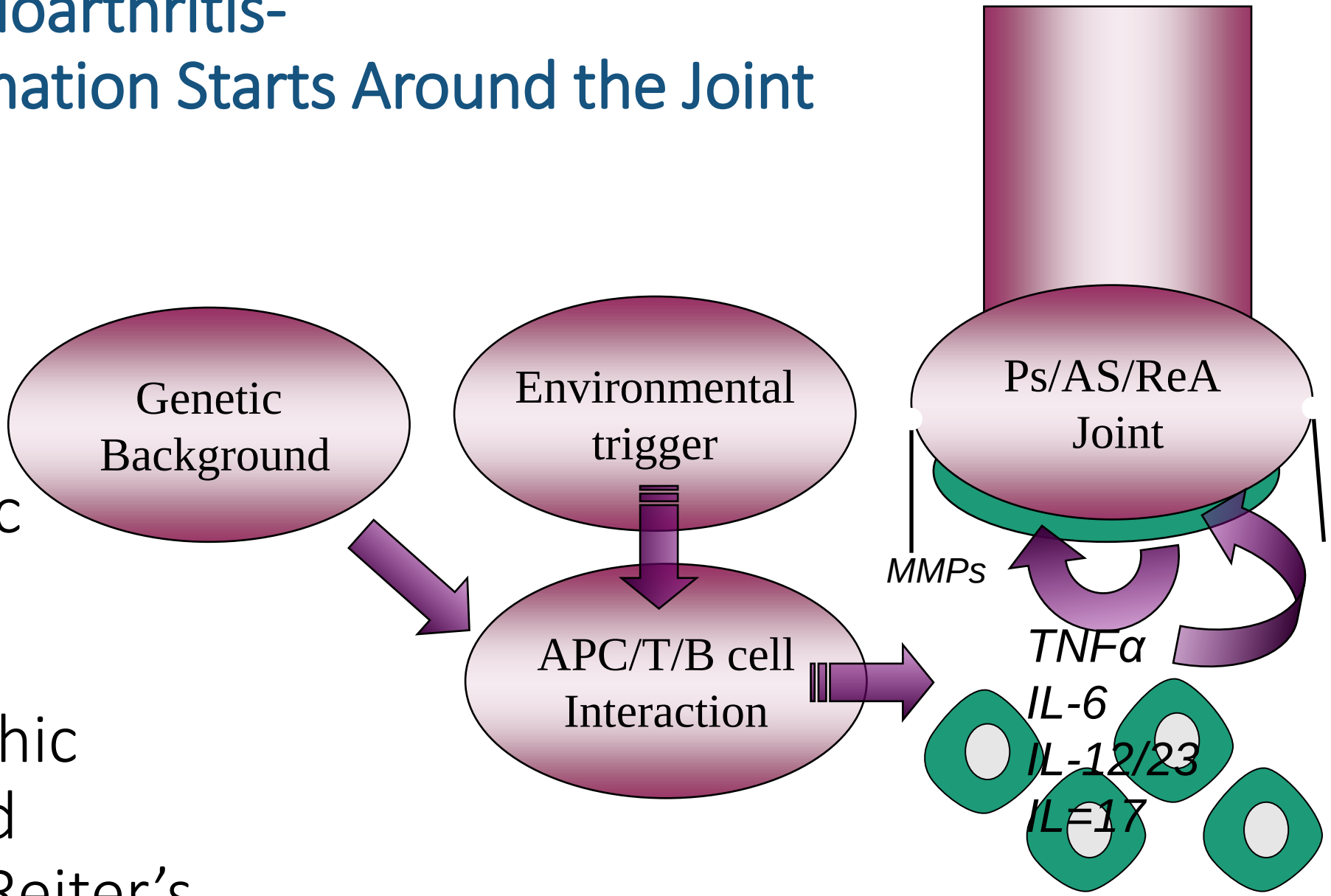
- Immunosuppression from disease +/- drugs
- Atlanto-axial subluxation if chronic Rheumatoid Arthritis (**Flexion/extension C-spine** pre-GA)
- Hospital-prescribed subcutaneous drugs
- Pneumonitis if methotrexate/leflunomide
- Suspending methotrexate if risk of renal impairment
- **All of the above**
- Slido Answer Slide

Pathogenesis of Rheumatoid Arthritis



Pathogenesis of Seronegative Spondyloarthritis- Inflammation Starts Around the Joint

Mnemonic
PEAR
Psoriatic
Enteropathic
Ank Spond
Reactive/Reiter's



Key Considerations

- ***Main immune suppression is from the diseases***, not the drugs (with a few prominent exceptions)
- ***Sc Methotrexate & biologics hospital prescribed & poorly documented*** in Great North Care Record
- ***Methotrexate should be suspended*** if:
  - Suspected/confirmed infection
  - Renal impairment/AKI
  - Suspected pneumonitis (need chest opinion to confirm: if not confirmed, usually restart on discharge)
  - Aplasia/severe neutropenia/severe transaminitis
  - Severe rash/erythroderma
- **Leflunomide**
  - Similar concerns: but enterohepatic circulation

Implication

Higher index of suspicion for infection

Ask all patients about alert cards
injections: look up & contact team

Usually suspended on admission

Usually restarted on discharge

Must be cleared colestyramine 8g tds for 11 days

Core Rheumatology Biologics/Oral Equivalents

Generic Name	Route	Target	Indication	ORIGINATOR/ Biosimilars
Infliximab	iv/sc	TNFα	RA/ PsA/ AS/ Cr/ UC	REMICADE/ Remsima/ Inflectra/ Flixabi
Etanercept	sc		RA/ PsA /AS/ nrAx	ENBREL/ Benepali / Erelzi
Adalimumab			RA/ PsA/ AS/ nrAx/ Cr/ UC/ HS/ Uv	HUMIRA/ Amgevita, Imraldi, Cytlezo, Hyrimoz, Hulio
Golimumab			RA/ PsA/ AS/nrAx/ UC	SIMPONI
Certolizumab			RA/ PsA/AS/ nrAx	CIMZIA
Rituximab	iv	CD20	RA/ GPA	MABTHERA/ Rixathon, Truxima
Tocilizumab	iv/ sc	IL-6	RA/ GCA	RO-ACTEMRA
Sarilumab	sc		RA	KEVZARA
Abatacept	iv/sc	CTLA4	RA	ORENCIA
Baricitinib	po	JAK1/2	RA	OLUMIANT
Tofacitinib	po	JAK1/3	RA/ PsA/ UC	XELJANZ
Upadacitinib	po	JAK 1	RA	RINVOQ
Filgotinib	po	JAK 1	RA	JYSELECA

Selected Other Current Biologics

Generic name	route	Target	Indications	Brand
Ustekinumab	sc	IL-12/23	PsA, Crohns	STELARA
Secukinumab	sc	IL-17	AS, PsA	COSENTYX
Ixekizumab	sc		PsA	TALTZ
Bimekizumab	sc		Pso/PsA	BIMZELX
Brodalumab	sc		Pso	KYNTHEUM
Guselkumab	sc	IL-23	Pso	TREMFYA
Risankizumab	sc		Pso	SKYRIZI
Tildrakizumab	sc		Pso	ILUMETRI
Vedolizumab	sc	$\alpha_4\beta_7$ integrin	UC/ Crohns	ENTYVIO
Denosumab	sc	nfκB	Osteoporosis	PROLIA
Romosozumab	sc	Sclerostin	Osteoporosis	EVENITY

Management of osteoarthritis

Explain that:
- osteoarthritis is diagnosed clinically and usually does not need imaging to confirm diagnosis
- management is guided by symptoms and physical function
- the core treatments are therapeutic exercise and weight management, alongside information and support.

Exercise

- For all people with osteoarthritis, offer therapeutic exercise tailored to their needs (for example, local muscle strengthening, general aerobic fitness).
- Consider supervised therapeutic exercise sessions.
- Advise people it may initially cause pain or discomfort but long-term adherence to an exercise plan will benefit the joints, reduce pain and improve function.
- Consider combining therapeutic exercise with an education programme or behaviour change approaches in a structured treatment package.

Weight management

For people who are living with overweight or obesity:
- advise them that weight loss will improve quality of life and physical function, and reduce pain
- support them to choose a weight loss goal
- explain that any weight loss is likely to be beneficial, but losing 10% is likely to be better than 5%.

For guidance and information on weight management, including interventions for weight loss, see NICE's topic page on obesity.

Information and support

- Tailor information to the person's individual needs and ensure it is in an accessible format.
- Advise where people can find further information on:
  - the condition and information that challenges common misconceptions
  - specific types of exercise
  - managing their symptoms
  - how to access additional information and support
  - benefits and limitations of treatment.

Manual therapy
Only consider for hip and knee osteoarthritis and alongside therapeutic exercise.

Devices
Consider walking aids for lower limb osteoarthritis.

Do not offer:
- acupuncture or dry needling
- electrotherapy treatments
- insoles, braces, tape, splints or supports routinely.

Pharmacological management

If needed, use:
- alongside non-pharmacological treatments and to support therapeutic exercise
- the lowest effective dose for the shortest possible time.

Review with the person whether to continue treatment. Base frequency of reviews on clinical need.

- Offer a topical non-steroidal anti-inflammatory drug (NSAID) for knee osteoarthritis.
- Consider a topical NSAID for other osteoarthritis-affected joints.

Consider an oral NSAID if topical medicines are ineffective or unsuitable and offer a gastroprotective treatment alongside.

Do not offer:
- paracetamol or weak opioids routinely, unless:
  - used infrequently for short-term pain relief
  - all other treatments are ineffective or unsuitable
- glucosamine
- strong opioids
- intra-articular hyaluronan injections.

Consider intra-articular corticosteroid injections for short-term relief when other pharmacological treatments are ineffective or unsuitable or to support therapeutic exercise.

Referral for joint replacement

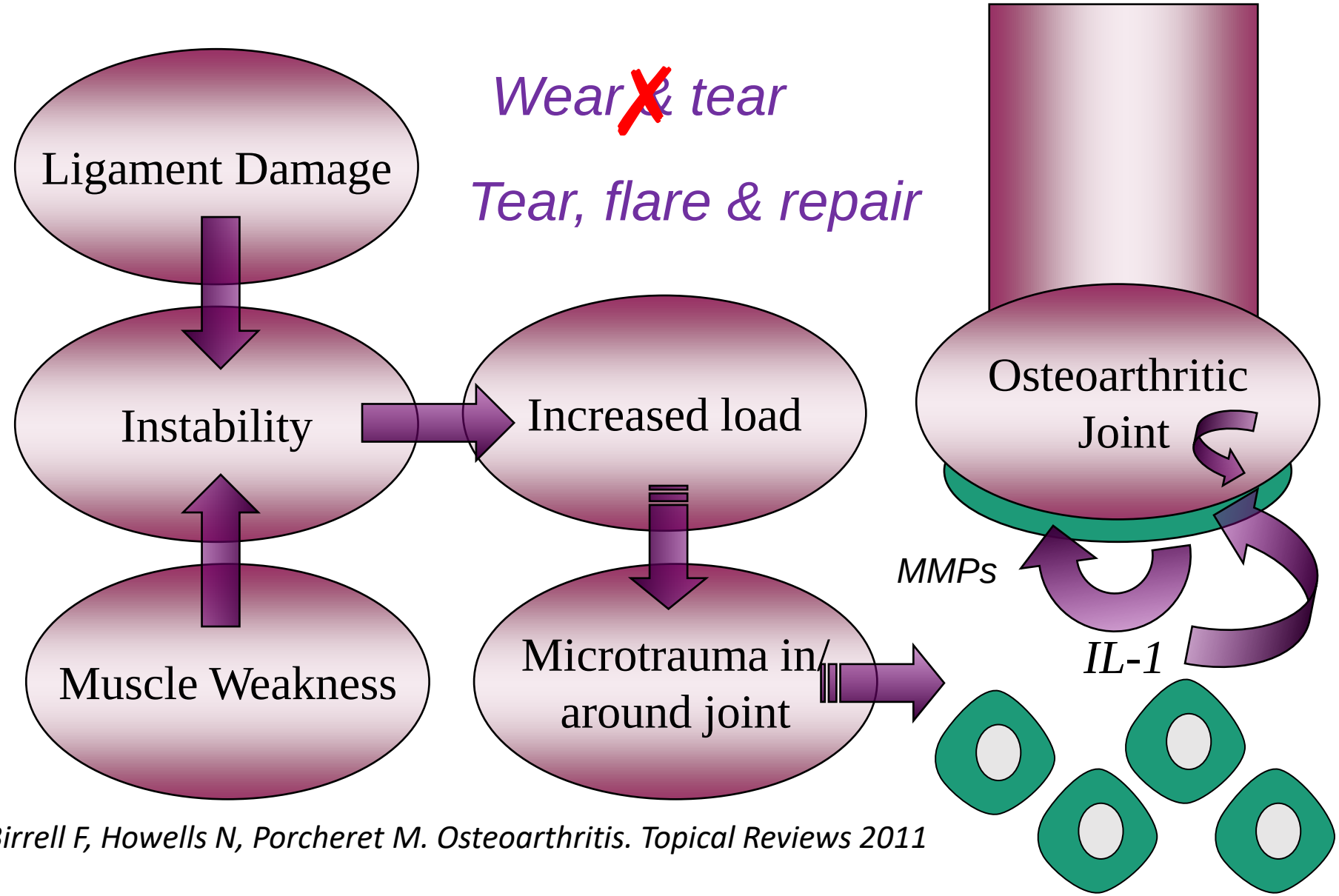
Consider referring people with hip, knee or shoulder osteoarthritis for joint replacement if:
- joint symptoms are substantially impacting their quality of life **and**
- non-surgical management is ineffective or unsuitable.

Do not exclude people from referral for joint replacement because of age, sex or gender, smoking, comorbidities, or overweight or obesity.

This is a summary of the recommendations on managing osteoarthritis in NICE's guideline on osteoarthritis in over 16s: diagnosis and management

NICE National Institute for Health and Care Excellence

Model of Osteoarthritis Pathogenesis



Birrell F, Howells N, Porcheret M. Osteoarthritis. Topical Reviews 2011

The Two Problems with Paracetamol

- Not an analgesic: a weak non-steroidal anti-inflammatory
- Problems

1) No clinical important analgesic effect in Osteoarthritis
    - Effect size 0.14 (95% CI 0.05-0.22)
    - High quality trials 0.10 (-0.0-0.23)

2) Significant toxicity
    - Mortality
    - GI (HR hospitalization 1.20, 95%CI 1.03-1.40)
    - Cardiovascular
    - Renal

Zhang et al, 2010; Roberts et al, 2015

Evidenced by Multiple Meta-analyses

- *"Paracetamol is ineffective in the treatment of low back pain and provides minimal short term benefit for people with osteoarthritis. These results support the reconsideration of recommendations to use paracetamol"*

  Machado et al, 2015

- *"All treatments except acetaminophen showed clinically significant improvement from baseline pain*

  Bannuru et al, 2015

- *"We see no role for single-agent paracetamol for the treatment of patients with OA irrespective of dose."*

  Da Costa et al, 2017

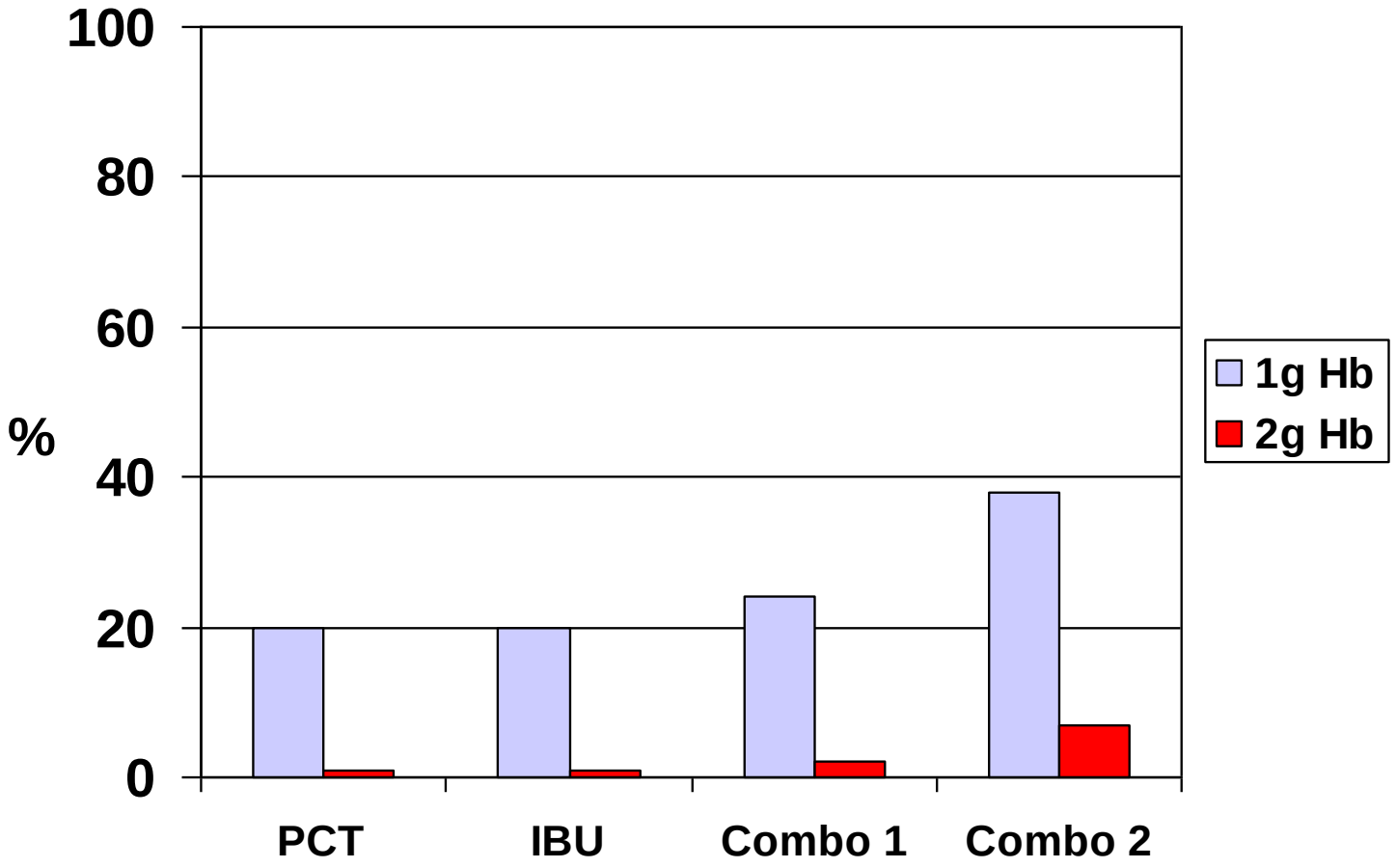
Not Explained by Channeling Bias: Compelling RCT Evidence

- Randomised controlled trial n=892 *Doherty et al, 2011*
  - Paracetamol (PCT) 1g tds
  - Ibuprofen (IBU) 400mg tds
  - Combo 1 PCT 500mg/Ibuprofen 200mg 3x/day
  - Combo 2 PCT 1g/Ibuprofen 400mg 3x/day
- 13-week study
- Pain & Function- no important benefit PCT
- Safety:

	PCT	IBU	PCT/IBU	PCT/IBU
• 1g Hb/L loss	20%	20%	24%	38%
• 2g Hb/dL loss	1%	1%	2%	7%

Doherty et al, 2012

Blood Loss



Doherty et al, 2011

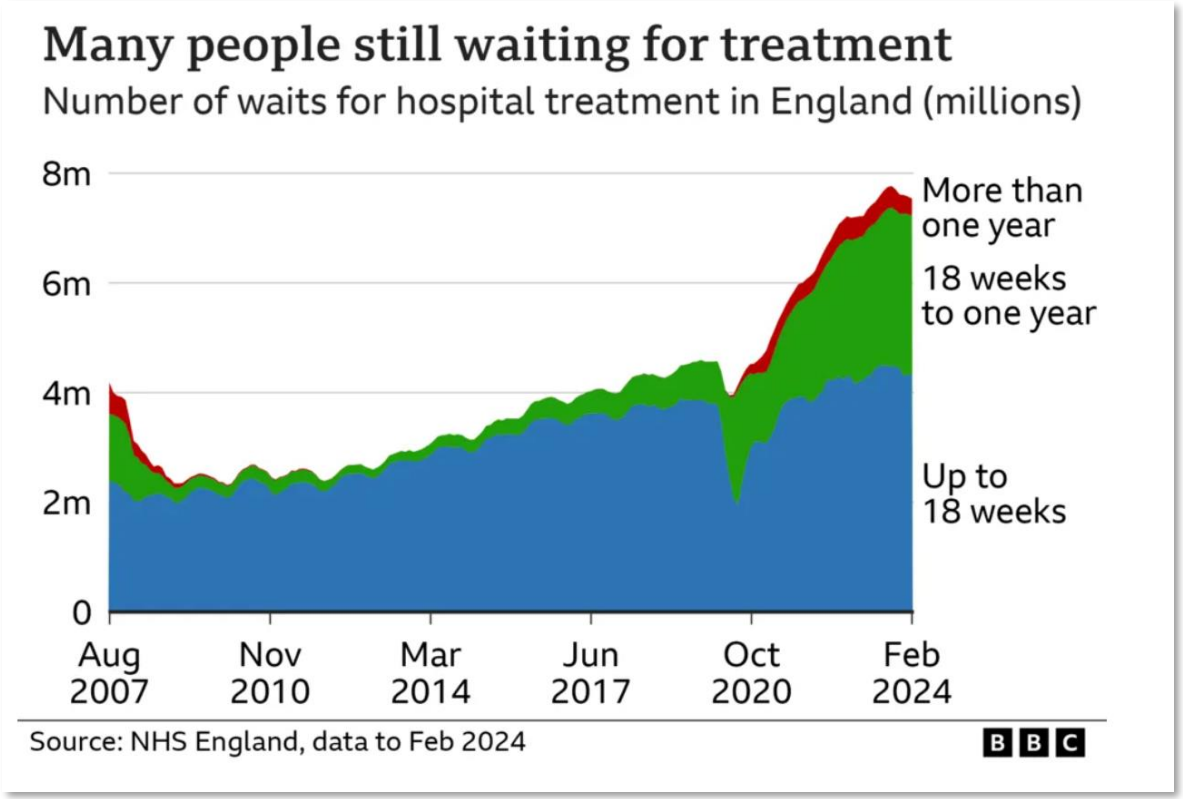
Main Implications

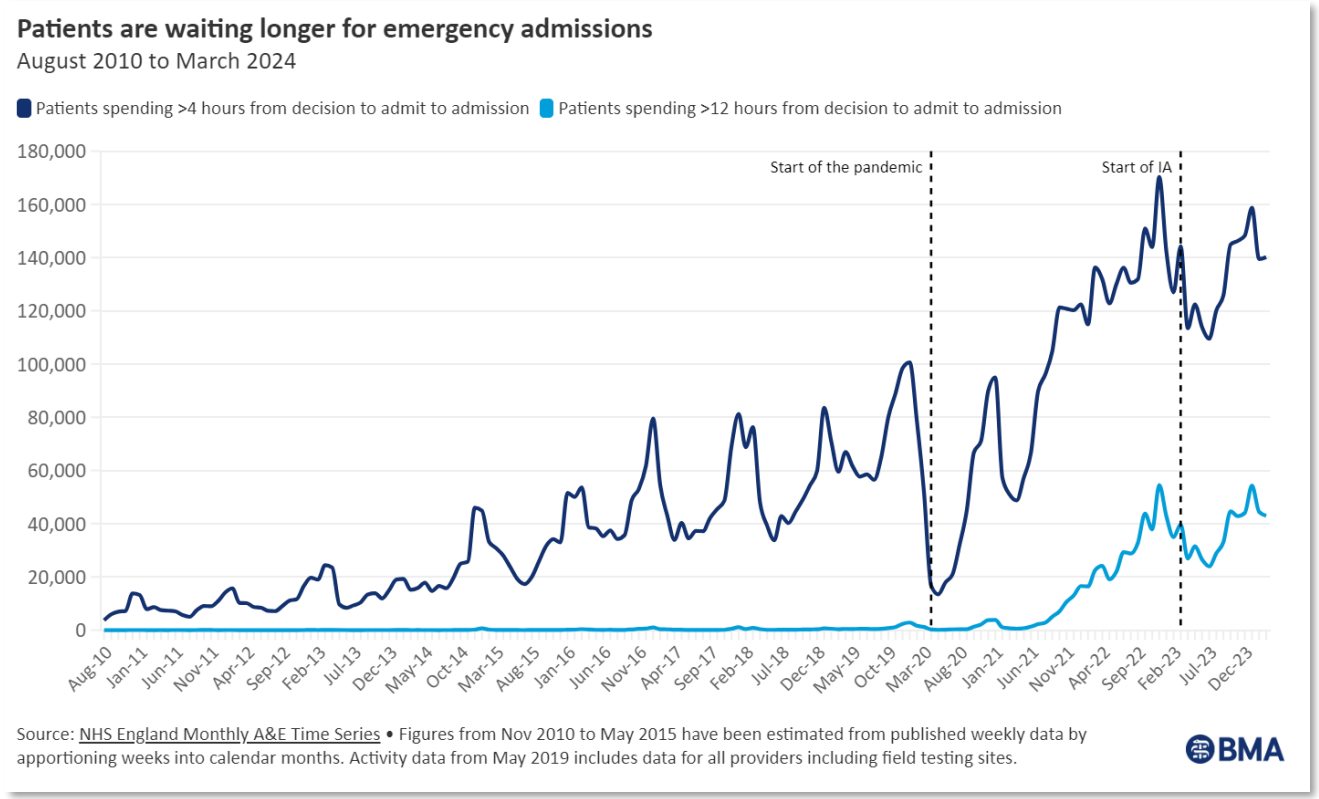
- Never coprescribe/recommend paracetamol to be used with other NSAIDs
- Think carefully before prescribing paracetamol at all for chronic pain
- Never forget NSAID toxicities as well as overdose makes this a tablet which would never be licensed now
- Do Yellow Card if life-threatening bleed on monotherapy/combination with another NSAID

Health Inequality & Epidemic of Lifestyle-Related Disease

UK healthcare system crisis

Doubling of deaths while awaiting treatment:
~120,000 vs 60,000 pre-pandemic
235,000 pandemic excess deaths



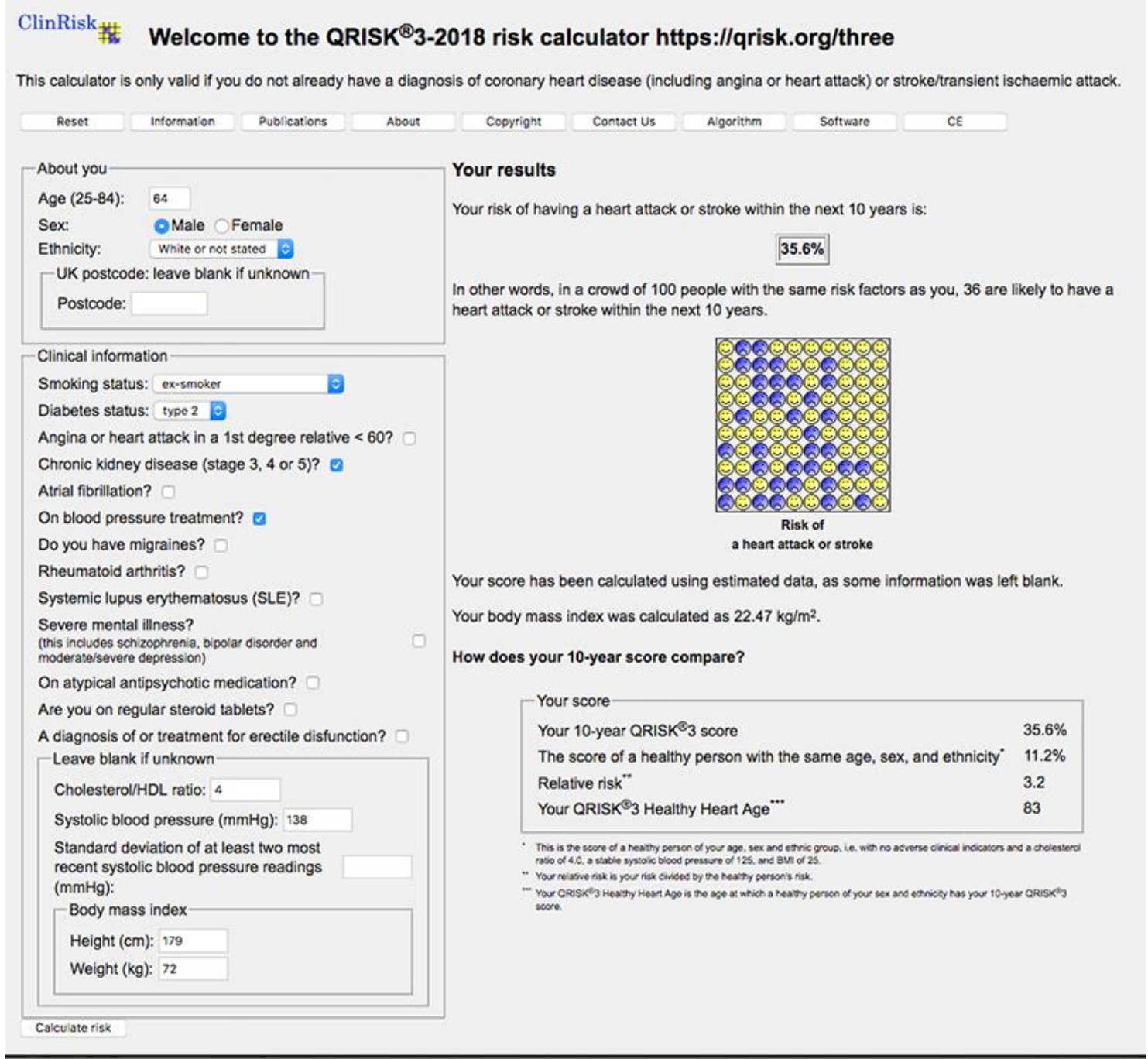


Pandemic & RECOVERY Trial Findings: Highlighting Rheumatology, Inflammation and Lifestyle

- Dexamethasone
  - Dexamethasone 6mg once a day for 10 days
  - ↓severe COVID-19 mortality by: 18% (O_2 NNT 8), 36% (V NNT 25)
    for 8 patients treated with tocilizumab, one additional life would be saved
- Tocilizumab
  - 596 (29%) of the patients in the tocilizumab group died within 28 days
  - Compared with 694 (33%) patients in the usual care group
  - Rate ratio 0·86; 95%CI 0·77-0·96; p=0·007, an absolute difference of 4%.
  - NNT 253
- Baricitinib
  - 513 (12%) of the patients in the baricitinib group died within 28 days
  - Compared with 546 (14%) patients in the usual care group
  - Reduction of 13% (rate ratio 0.87, 95%CI 0.77-0.98; p= 0.026, NNT 20)

Recovery, 20223

Why Lifestyle Matters: Inflammation & Outcomes Inextricably Linked



British Society of lifestyle medicine

2016

- ✓ First BSLM Conference (Bristol)
- ✓ Growth of membership

2017

2018

- ✓ Regional Reps appointed
- ✓ Over 20 LM courses accredited
- ✓ #1Change launched

#1CHANGE

INTERNATIONAL BOARD OF LIFESTYLE MEDICINE

- ✓ IBLM Dip launched in UK
- ✓ Group Consultations Support Launched
- ✓ Student focus initiated

2019

2020

- ✓ First virtual conference
- ✓ Membership exceeded 1,000
- ✓ Special Interest Groups launched
- ✓ Group Consultations webinars reach over 1,500 registrants
- ✓ Lifestyle Medicine Journal launched

2021

- ✓ First hybrid event EICC
- ✓ Learning Academy launched
- ✓ Collaboration with universities & organisations delivering LM
- ✓ Increased Member benefits unlocked
- ✓ Free monthly webinar series launched

2022

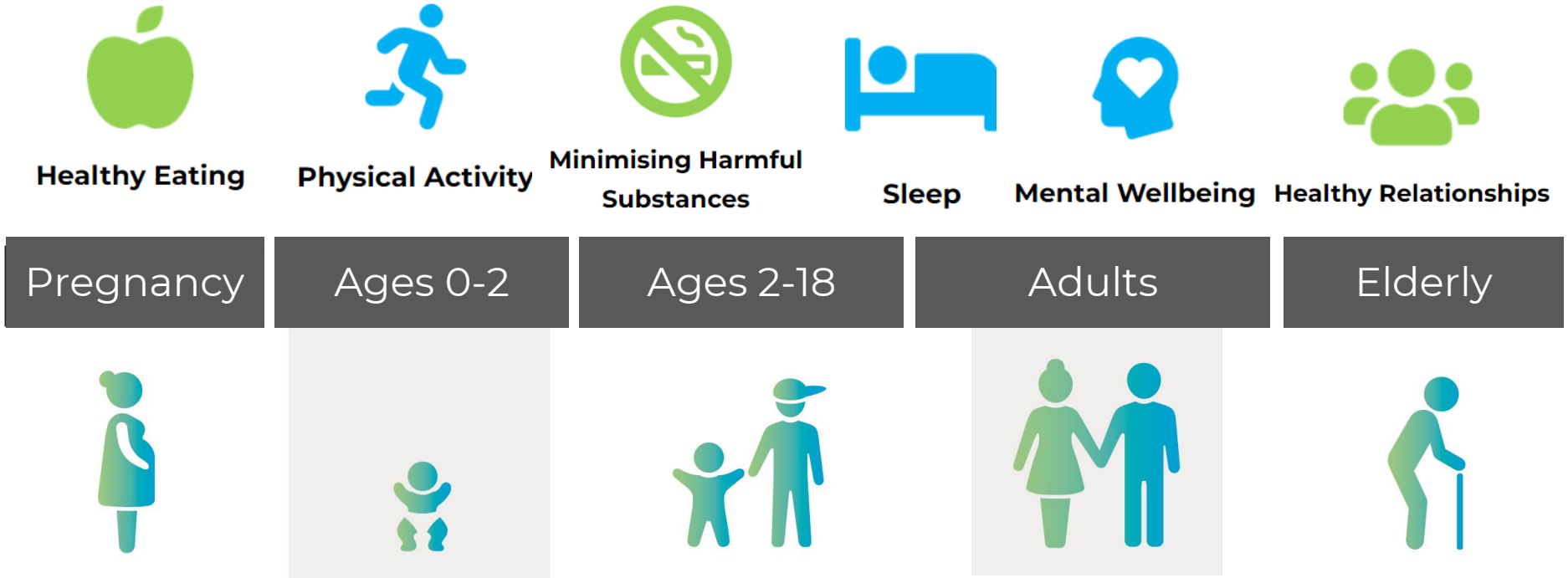
- ✓ Record numbers hybrid event,+1,200
- ✓ First Learning Academy short courses
- ✓ Presidential & fellowship roles introduced
- ✓ LM inclusion in NICE guidelines
- ✓ Over 800 UK Diplomates

2023

British Society of lifestyle medicine

3 Principles, 6 Pillars of Lifestyle Medicine & Group Consultations- In-person & Virtual

- Acknowledge need for action on social determinants of health
- Proven techniques to support people to sustain lifestyle change
- Knowledge of the 6 pillars



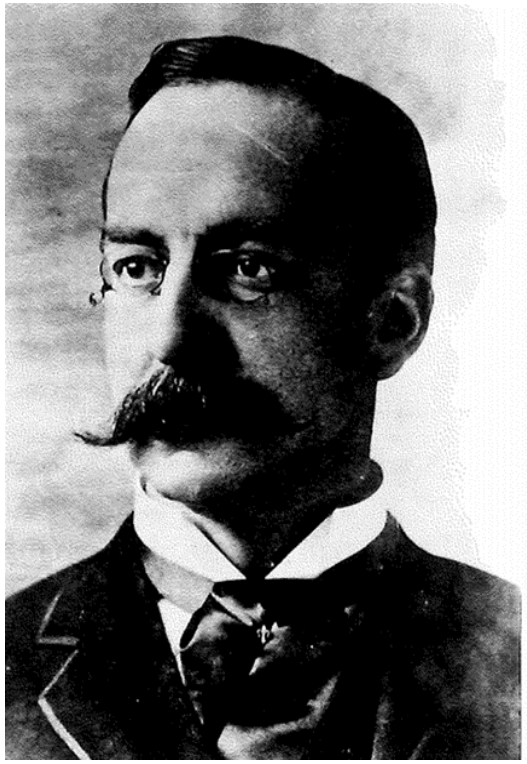
Inspiration from a Pioneer: Joseph Pratt's 'Class Method': Forged as a Tool to Address Inequality

The undisputed pioneer of group consultation models

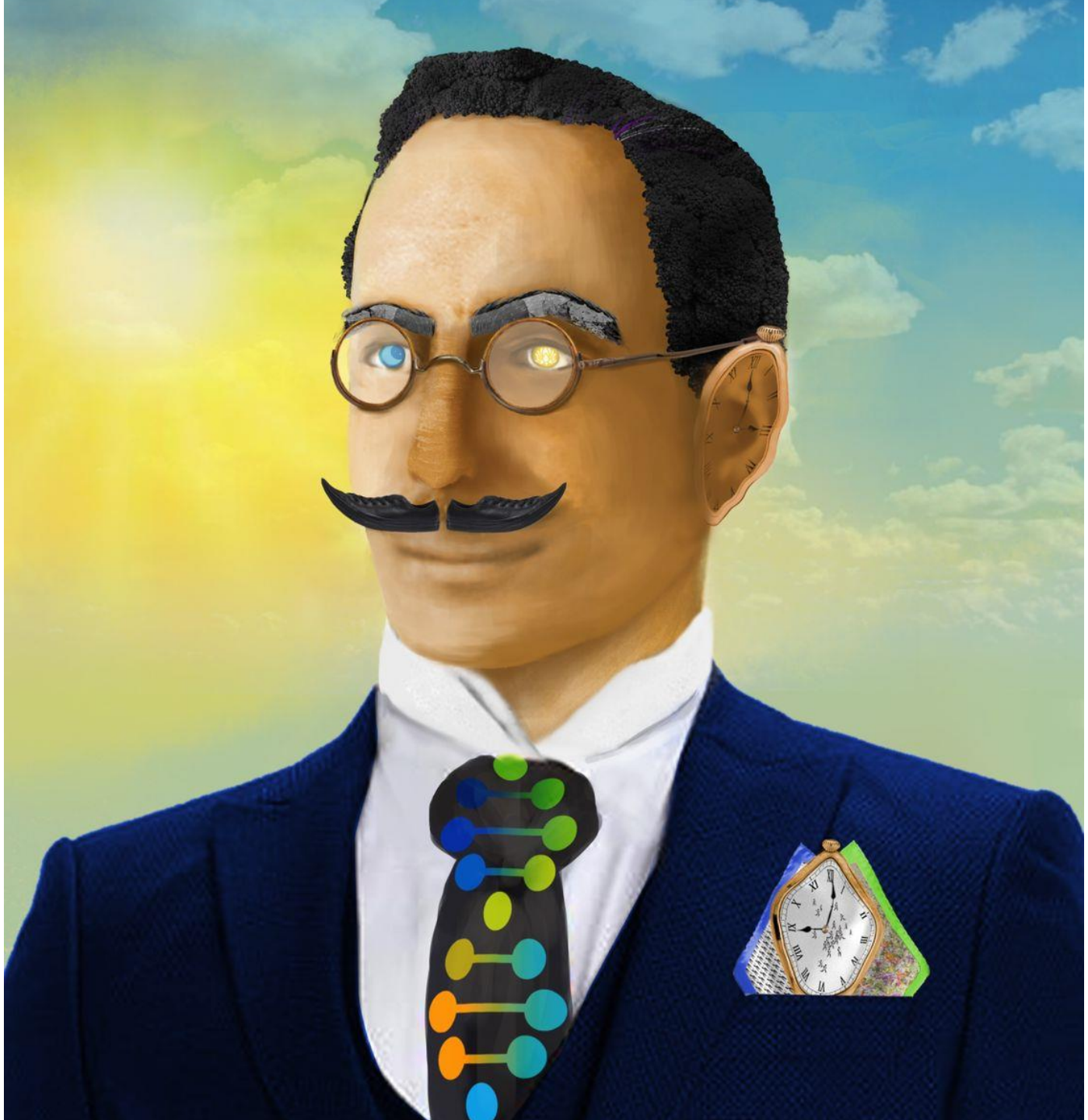
Pioneered group visits out of necessity at Massachusetts General Hospital in 1905

Spread to chronic disease management, scaled & sustained for decades: leading to continuous group psychotherapy practice

New England Journal of Medicine, 1955, 253: 203-204; Pratt, JAMA 1907



Acknowledgement Beth Frates, MD

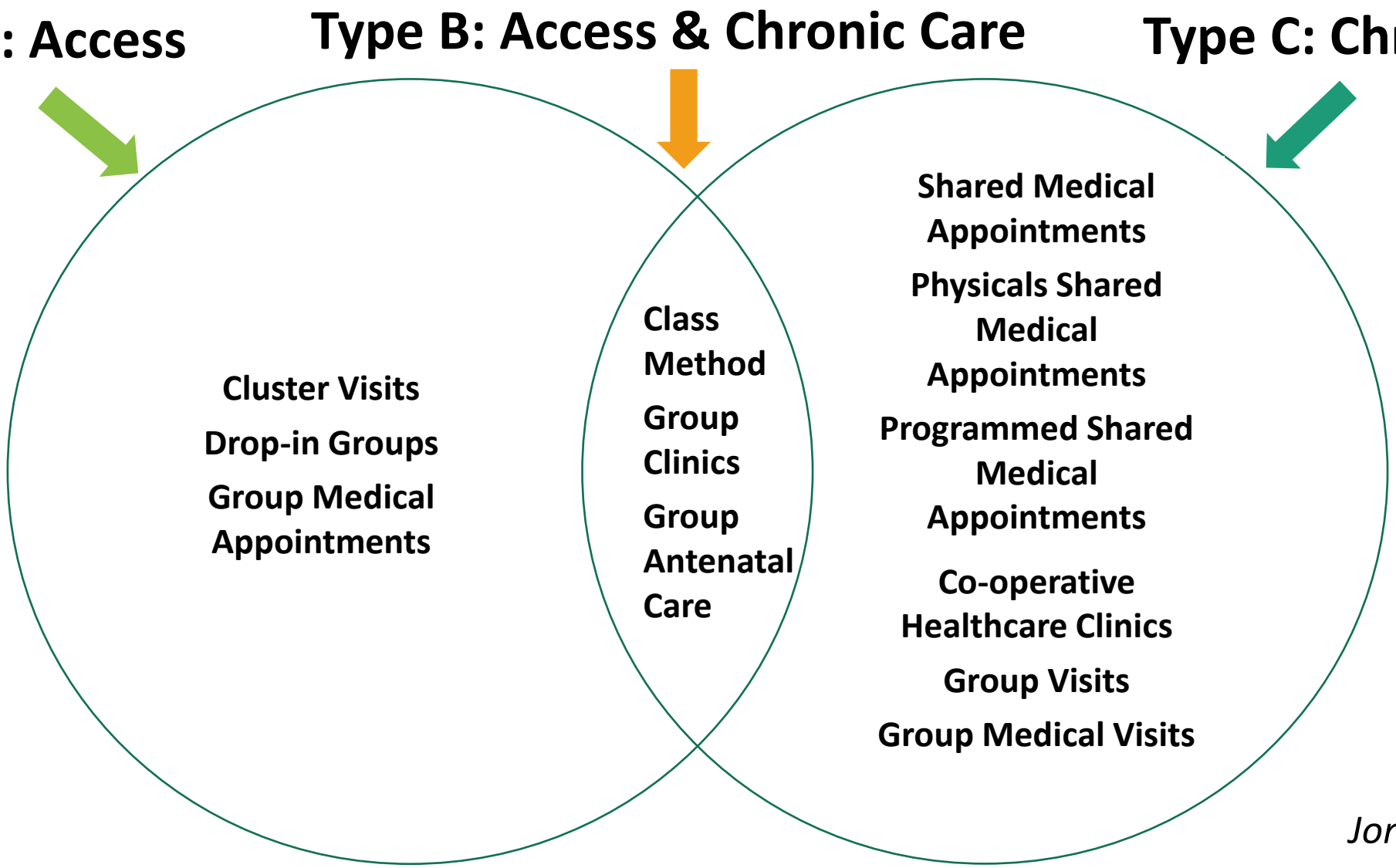


Devedas & Birrell,
CIMA Art 2022

Healthcare's Quintuple Aim- How Does Great Care Look?

Birrell et al, 2021

Virtual, In-person & Hybrid Group Consultation Models



Jones et al, 2019

Evidence Across Life

Pregnancy

Group Antenatal Care

- ↓ Low birth weight
- ↓ Preterm births
- ↓ Maternal depression
- ↓ Maternal obesity
- ↑ Knowledge
- ↑ Satisfaction
- ↓ Cost

Ages 0-2

Developmental Reviews

- ↑ Clinical efficiency
- ↑ Uptake of 2-year review
  Embedded for 85%

Ages 2-18

Kids Bowel & Bladder

- ↑ 3 month waiting list eliminated in first quarter
- ↑ 900-1800% clinical efficiency
- ↑ High satisfaction
- ↑ Embedded as pathway default
- ↑ MDT follow up groups

Adults

Diabetes

- ↑ Knowledge/confidence self-manage
- ↓ Hypertension & HbA1c
- ↑ Clinical efficiency – >300%
- ↓ Hospital admissions

Hypertension

- ↓ BP
- ↑ drug & lifestyle compliance

Renal

- ↑ 95-100% patient/carer satisfaction
- ↑ 350% efficiency = est ↓£400k/yr

Elderly

Elderly with multimorbidity

- ↓ Admissions
- ↓ Costs
- ↓ Medicines
- ↓ Incontinence

- ↑ Satisfaction
- ↑ Self-efficacy
- ↑ Quality of life

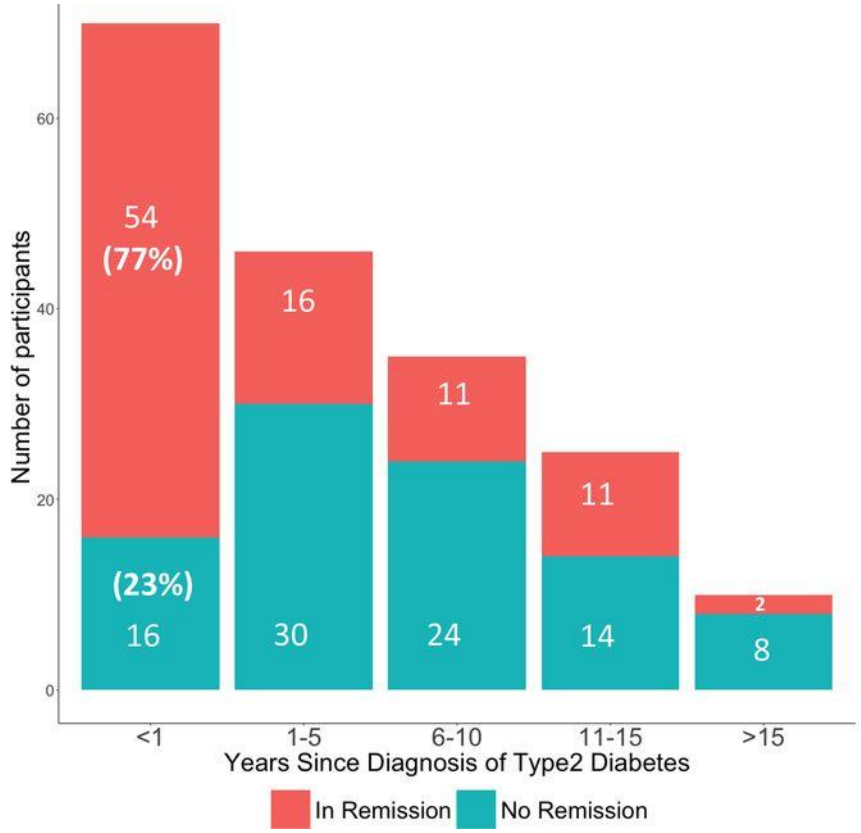
Jones T, Darzi A, Egger G, Ickovics J, Noffsinger E, Ramdas K, Stevens J, Sumego M, Birrell F. A Systems Approach to Embedding Group Consultations in the NHS. Future Healthcare Journal. 2019;6:8-16. doi.org/10.7861/futurehosp.6-1-8

Numerous Systematic Reviews on Group Care

- Health Service Performance vs Triple Aim
  - Thirty-one studies met the inclusion criteria:
    - Pregnancy (n = 9)
    - Diabetes (n = 15)
    - Other chronic health conditions (n = 7)
  - Potential to improve: patient experience, outcomes & costs
  - No adverse effects
  - Conclusion- more widespread use justified

Cunningham et al, 2021

A cohort of 186 patients with T2D on a low-carbohydrate diet for an average of 33 months stratified according to years since diagnosis, comparing baseline data for time since diagnosis of T2D between the remission group (n=94) and non-remission group (n=92).



1.Remission group Median (IQR)

2.0 (0.0, 68) months since diagnosis

2.Non remission group Median (IQR)

72 (28, 127) months since diagnosis

p<0.0001

Those who achieve remission have had their T2D for a shorter time

David Unwin et al. BMJNPH 2023;6:46-55

BMJ Nutrition, Prevention & Health

Consistent Patient Perspective

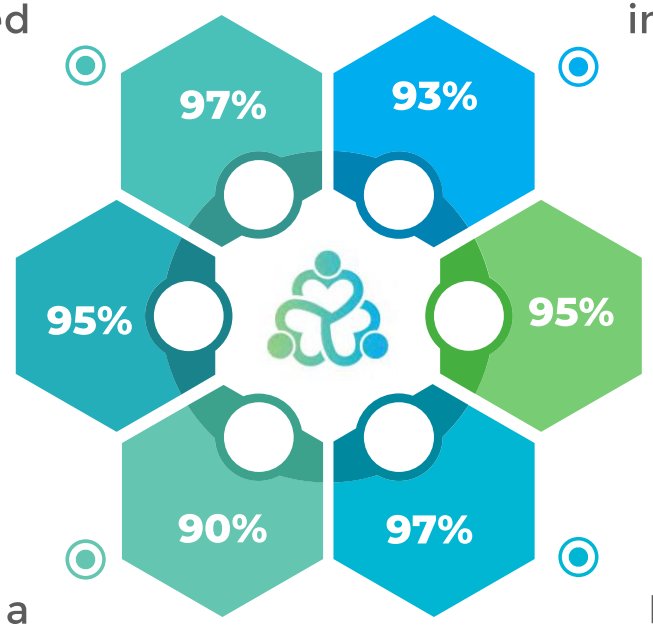
What patients have told us about their Group Consultations experience

Website

App

Patients reported feeling more listened to & satisfied

Patients said they felt more involved in decision making



Patients report having improved access & spending more time with their clinician

Patients felt more able to cope with their condition & keep themselves healthy

Patients report having a better understanding of their condition

Patients would recommend Group Consultations to friends & family

group consultations®

- *Average data across UK from those organisations we have worked with to date*

Practicing Lifestyle Medicine

- Knowledge
  - What high quality care looks like: quintuple aim
  - Evidence underpinning all 6 pillars
  - Group consultations to create time and space for this
  - Virtual group consultations to address pandemic issues: both for care & learning
- Skills
  - Holistic approach to risks, lifestyle investigations & interventions
  - Coaching
  - Deprescribing
- Attitudes
  - Patient-centred approach
  - Willing to challenge orthodoxy/dogma and address structural health inequalities


LETS MEET AT
THE ANNUAL CONFERENCE
FOR LIFESTYLE MEDICINE
19TH – 21ST
SEPTEMBER
BSLM
2024
The Glasshouse
International
Centre for Music
NEWCASTLE
MORE INFO HERE!
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Lifestyle Medicine
Open Access

Creating Compassionate Communities and Promoting Health: Above and Beyond Social Prescribing

First published: 27 July 2023 | Last updated: 17 October 2023

GO TO SECTION

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Open Access

Compassionate communities as the foundation of the next healthcare revolution

Julian Abel, Thomas R. Wood

Lifestyle Medicine | First Published: 07 September 2023

First Page | Full text | PDF | References | Request permissions

Agenda/Learning Outcomes

By the end of this session, attendees will:

- Know core Rheumatology conditions presenting to AMU
  - Acute vasculitis (including Giant Cell Arteritis)
  - Septic Arthritis
  - Gout
  - Osteoarthritis & other inflammatory arthritides
  - Atlantoaxial subluxation
- Understand the key management options for these and wider implications:
  - Gastrointestinal bleed: risk & reporting
  - Disease Modifying Drugs and their toxicities
  - Biologic Therapies
  - Lifestyle Medicine
- Appreciate future opportunities to both deliver & manage emergency care

Take Home Messages

- Giant Cell Arteritis- ring Rheumatology/Pred 40mg Out of Hours
- Septic Arthritis- aspirate or ring acute hot joint service
- Gout- colchicine/NSAIDs, prophylaxis once improving; treat to target <300µM
- Atlantoaxial subluxation- think flex/ext C-spine before GA
- Gastrointestinal bleed: remember paracetamol/Yellow card
- Disease Modifying Drugs: omit MTX/extract Leflunomide
- Biologic Therapies: ask for alert card, consider infection & take advice
- The Future:
  - Group consultations
  - Lifestyle Medicine
  - Personalised medicine
  - Patient-centred care

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Questions?