The Changing World of Rheumatology for Podiatrists

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The context

- Rheumatology has come on in leaps and bounds in the past 10 years but…
- Podiatry in the UK is under funded already
- Most podiatry is primary care based and integration with rheumatology can be difficult
- Doctors do not understand what we do or have to offer
- Policy makers understand even less!

The scale of the need

- Musculoskeletal Disorders (MSDs)
  - 1 in 4 of all adults have a musculoskeletal condition at any one time
  - 1 in 2 of over 75s
  - In 2/3 of people MSK problems are multi-joint

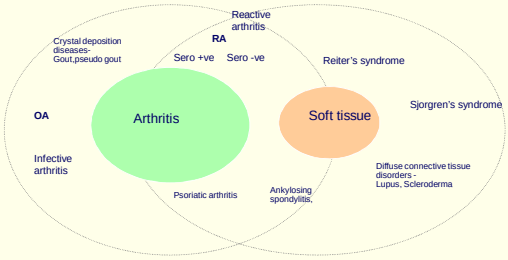
The scale of the need

- Foot problems
  - 20% of all adults have had foot pain in the past month
  - 60% in the past six months
  - One quarter of all over 55s have ongoing foot pain
  - MSK problems cause 2^{ary} symptoms
    - 66% hyperkeratoses
    - 24% digital lesions
    - 17% ulcerations

Rheumatological conditions/ MSDs

- Rheumatoid arthritis
- Osteoarthritis
- Metabolic disease
  - Gout
  - Pseudogout
- Connective tissue disease
  - Lupus
  - Scleroderma
- Seronegative disease
  - Psoriatic arthritis
  - Ankylosing spondylitis
  - Reactive arthritis
- Soft tissue problems
- ‘Sports’ injuries
- Misc MSK
- Pod biomechanics
- Orthopaedics
- Rehab medicine
- Pod surgery

Inflammation/joint degeneration

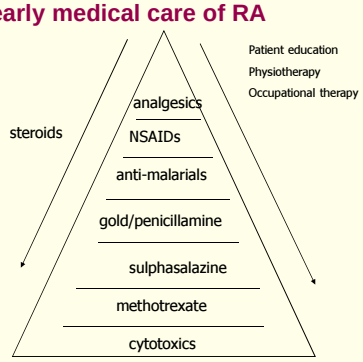


First….

Forget what you thought you knew….

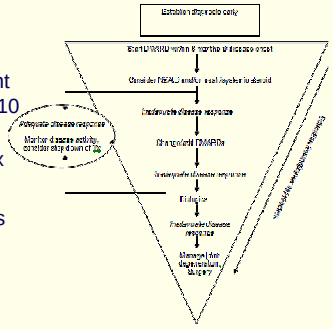
The revolution in early medical care of RA

Old pyramid model = NSAIDs to failure or adverse reaction, then DMARDs (antimalarials, gold, sulphasalazine) 5-10 years after diagnosis



New model of RA care

- Medical management much improved in last 10 years
  - Early aggressive Tx
  - Biologics
- Diminishing numbers of patients with uncontrolled/end stage RA/PsA/AS/CTDs

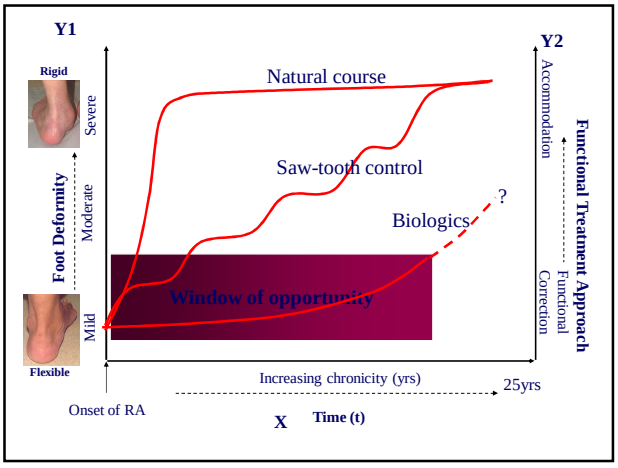


Biologic therapy

- Anti-TNF drugs (infliximab, etanercept, adalumimab, certolizumab-pegol
- Anti IL6- tocilizumab,
- Anti B cell (rituximab)
- Variable response but outstanding in a proportion of patients
- Sub clinical disease persists
- Foot involvement still prevalent

Disease staged management

- Better medical management
- Opportunity for better podiatric management
- Needs vary over the lifetime/course of the disease
- Getting the timing of Tx right
- 'Window of opportunity' (Sims 1991, Kettlekamp 1972, Stockley 1990, Keenan 1991, Woodburn & Helliwell 1995)



Long standing opportunities

- Flat medical hierarchy in rheumatology
- Medical/AHP integration – MDT working
- Recognition of the importance of foot problems
- Podiatry has a track record in related areas eg biomechanics

What podiatrists currently provide

Foot health service provision for rheumatology falls into five categories.

- Education and self management advice, including footwear advice.
- General foot care, nail cutting, corn and callus reduction, provision of padding.
- Provision of, or assistance with finding orthoses and footwear.
- High risk management of the vasculitic or ulcerative foot.
- Extended Scope Practice (ESP) and surgery

Education and self management advice

- Education programs commonplace.
- Self management = improved health status (Rao & Hootman 2004), but….
- conflicting evidence over the merit of formal education programs for patients with RA.
  - measurable benefits are related to short-term effects on drug compliance (Hill, Bird & Johnson 2001) and to psychological factors and impact of disability (Riemsma et al. 2004).
  - measurable improvement in knowledge but only small and non-significant changes in objective and health related quality of life measures (Helliwell et al. 1999; Hill, Bird & Johnson 2001).

Ultimately...

- Education allows patients to participate in their management
- Provision of information/education is considered a minimum standard in the care of RA (ARMA 2004).

Self care

- Self-care/management is a key pillar of the Long Term Conditions programme.
- For self-care to work, education and information must be supplemented by a practical support system (King's-Fund 2004).
- For general self-care relating to the foot, a comprehensive self management package – the FOOTSTEP program has been published (Waxman et al 2002).

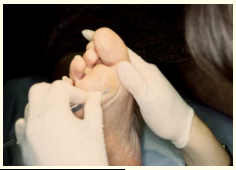

Journal of Clinical Epidemiology

FOOTSTEP: a randomized controlled trial investigating the clinical and cost effectiveness of a patient self-management program for basic foot care in the elderly

General foot care

Nail cutting, corn and callus reduction, provision of padding.

- MSK conditions = increased need for a range of basic foot care services (Muir-Gray 1994)
- 3/4 of rheumatology outpatients require routine foot care (Williams & Bowden 2004).
- Evidence for benefit of callus reduction in RA 'equivocal'. (Davys et al. 2005)

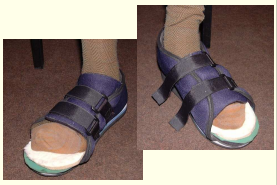


Footwear education

- Footwear advice
- Examples of footwear
- Brochures to take away
- Internet sites
- Good local knowledge – up to date
- Build up a departmental footwear resource pack for other health professionals

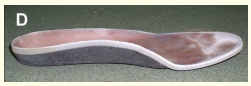
High street to Hospital Footwear

- What constitutes the end of high street and the need for prescription / bespoke footwear?
- Referral criteria are not strong
- Discordance between need and provision of footwear
- Regional variation



Foot orthoses

- 33 Studies
  - 5 RCT's (15%)
  - 1 CCT
  - 15 Prospective observational
  - 12 retrospective studies
- No pooled data analysis
- Summary
  - Orthoses and footwear 'likely' to be of benefit
- Remarks
  - Further RCTs
  - Better observational studies

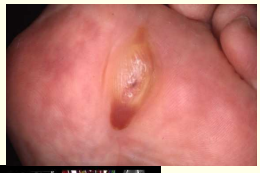


Farrow SJ, Kingsley GH, Scott DL. Arthritis Rheum 2005;53:593-602.

High risk footcare

Management of the 'high risk' vasculitic or ulcerative foot.

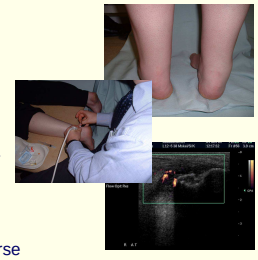
- Accounts for approximately ¼ of Leeds rheumatology foot health clinic's appointments
- Rheumatology patients made up 6% of the total caseload of one multi-system wound care service (Steed et al. 1993).
- Prevention and management of lesions in the high risk foot is an important part of the foot heath service in rheumatology (Korda & Balint 2004)



Extended scope practice

Extended Scope Practice

- Access to enhanced investigations
- Interventions
  - pharmacological management
  - injectable steroids (ARMA 2004).
- Training issues
- Support for extending AHP roles (Carr 2001)
  - Government
  - Professions
  - Rheumatologists
- Currently no national accredited course so no *de facto* standard for ensuring competence



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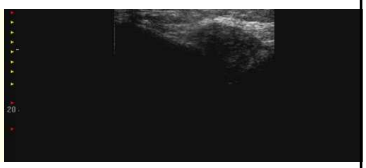
Joint and soft tissue injections

MTP joint injection

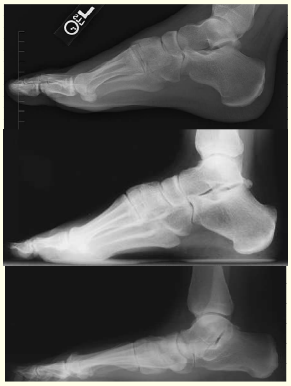


Investigations

X ray
HRUS
[MRI]
Blood tests – ESR, CRP, RF, Anti CCP, HLA B27

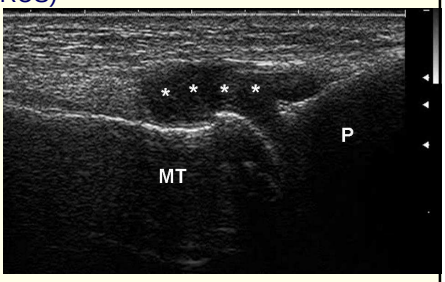
Imaging

- Plain X ray
- Weightbearing vs non weightbearing

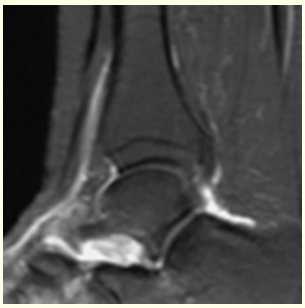


Imaging

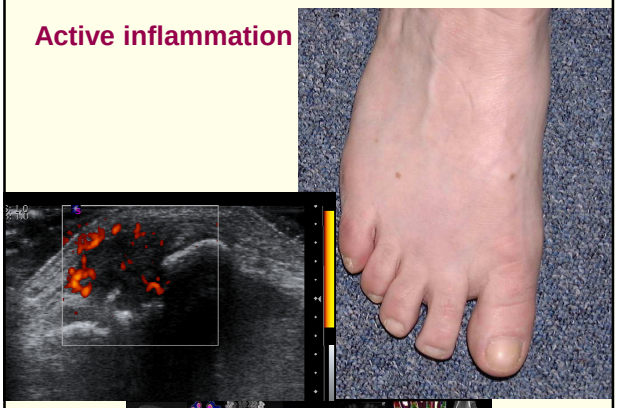
- Synovitis (HRUS)



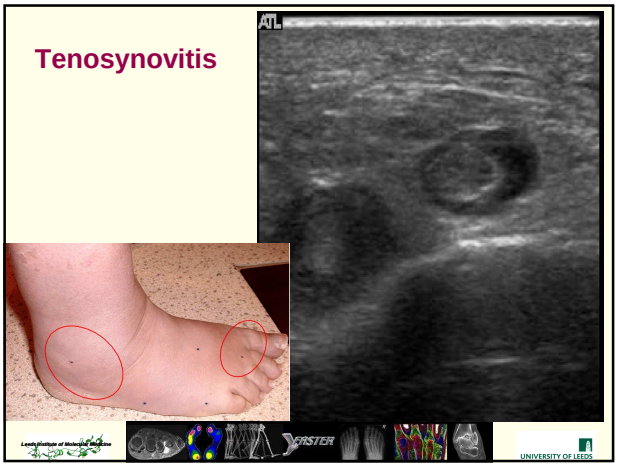
Diffuse synovitis (MRI)



Active inflammation

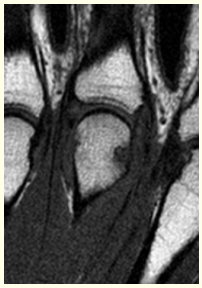


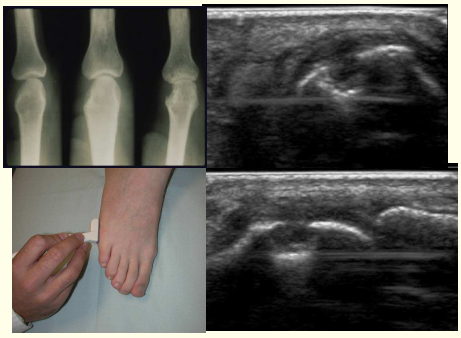
Tenosynovitis



Erosions

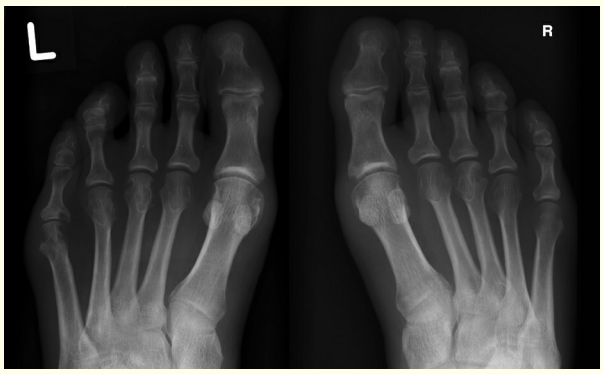
- Erosions occur in first year of RA disease
- Visible earlier on MRI and U/S than plain x-ray





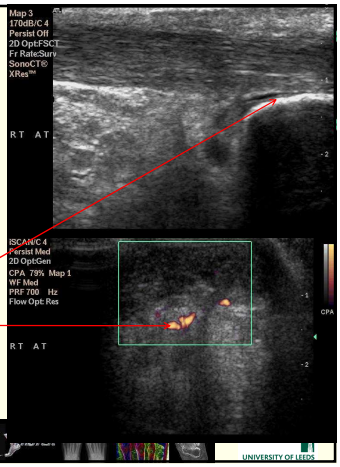
Wakefield et al. OMERACT 5 Return, 2005

- Delay in x ray presentation up to 2 years



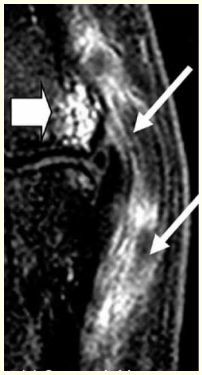
Seronegative disease

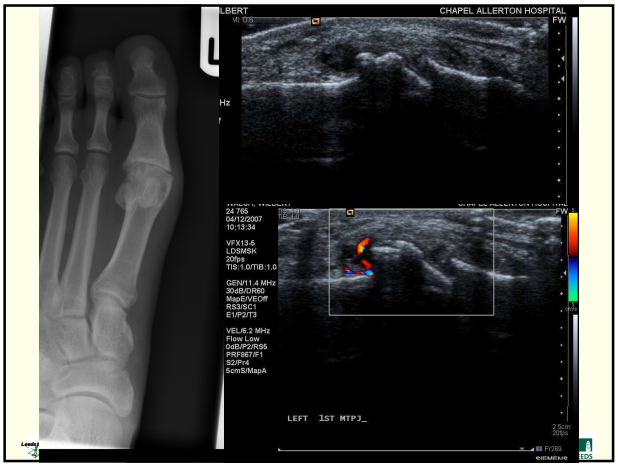
- RA driven by synovitis
  - Joints
  - Tendon sheath
  - Bursa
- Sero negative arthritis (eg PsA)driven by enthesitis
  - Insertion of
    - Tendons
    - Ligaments



A word on OA

- Common – 60% of over 65s
- "Joint failure"
- Considered a process rather than disease
- Not just "wear and tear"
- 'Active' and 'passive' clinical presentations





Primary care role

Three criteria for suspecting IA in primary care (after Emery et al 2002) - early referral!

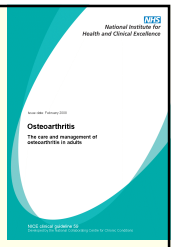
1. pain on lateral squeeze MTP/MCP joints
2. ≥3 swollen joints
3. morning stiffness of ≥30 minutes

http://www.arthritisresearchuk.org/

Opportunities to improve care

- NICE
- PRCA / ARMA guidelines
- Genuine evidence
- Abandonment of old models
- Foot problems important to patients
- Primary care emphasis

NICE Clinical guidelines

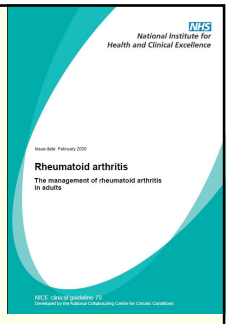


- NICE Guideline – OA
- *"There are limited data for the effectiveness of insoles (either wedged or neutral) in reducing the symptoms of knee OA. However in the absence of well-designed trial data and given the low cost of the intervention, the GDG felt that attention to footwear with shock-absorbing properties was worth consideration."*
- *"Insoles are commonly provided by podiatrists and orthotists but may also be provided by physiotherapists and occupational therapists. Referral for, or direct local provision of, footwear advice should always be considered."*

NICE OA recommendations

- **R8** … Positive behavioural changes such as exercise, weight loss, use of suitable footwear and pacing should be appropriately targeted.
- **R16** Healthcare professionals should offer advice on appropriate footwear (including shock absorbing properties) as part of core treatment for people with lower limb osteoarthritis.
- **R17** People with osteoarthritis who have biomechanical joint pain or instability should be considered for assessment for bracing/joint supports/insoles as an adjunct to their treatment.

NICE RA guidelines



- Feb 2009
- Highly influential in mainland UK
- Widely endorsed
- Covers all aspects of RA care
- **Specific podiatry section**

NICE CG - podiatry

- **Recommendation 14** All people with RA and foot problems should have access to a podiatrist for assessment and periodic review of their foot health needs
- **Recommendation 15** Functional insoles and therapeutic footwear should be available for all people with RA if indicated.

Standards of Care (PRCA/ARMA)

A user-centred or patient facing approach

- Recommendations relate to the needs of patients rather than services and professions
- The standards acknowledge that those planning and delivering foot health services around the UK face differing demographic, geographic and economic factors
- The standards are not treatment guidelines or algorithms of care, though they refer to these where available.

The Standards

- Generic Foot Health Standards
  - standards of foot health care that everyone with musculoskeletal foot health problems should be able to expect.
- Disease Specific Foot Health Standards
  - supplementary standards that are **additional to the generic standards** and are unique to those with specific musculoskeletal conditions.
    - Inflammatory arthritis
    - Osteoarthritis
    - Back pain
    - Metabolic bone disease
    - Connective tissue disorders

Key points in the standards

1. People with foot symptoms should be provided with information about their musculoskeletal condition and their foot problems – **all** health professionals have a part to play in this process.
2. People should be helped to look after their own foot health needs as far as is practicable and safe – empowered self care is appropriate to the needs of many, although not all, people with day-to-day foot problems.
3. Foot health care can be provided by many different members of the health care team; including podiatrists, consultants, general practitioners, **nurses**, orthotists, physiotherapists, occupational therapists and others
4. Service users should be involved in planning any reconfiguration of foot health services.

Key points in the standards

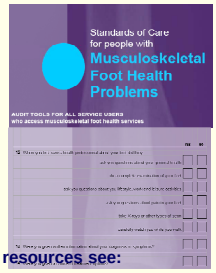
5. Foot specialists should be trained in musculoskeletal diseases and musculoskeletal specialists should be trained to identify foot problems and treatments and to refer as appropriate.
6. Clear referral pathways should be developed for referral to the various professions involved in the care of foot problems.
7. All people with musculoskeletal foot problems should receive at least an assessment of their foot health needs.
8. People with musculoskeletal diseases who experience a change in disease status should have their foot health needs reassessed.
9. People should receive professional foot care relevant to the complexity of their needs.

Implementing the standards

Information for:

- Service managers
- Clinicians
- Service users

- Resources available
  - Downloadable audit tools
  - On line education resources
  - Change management teams
  - In house training
  - Patietn leaflets



For further information and downloadable resources see:
www.prcassoc.org.uk/standards-project

Opportunities to improve care

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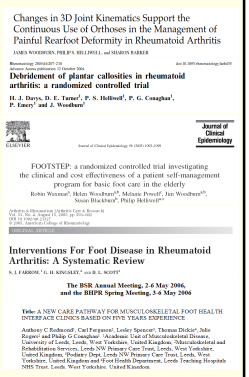
Genuine evidence

- Orthoses
- Self management
- Callus debridement
- Care pathways


Changes in 3D Joint Kinematics Support the Continuous Use of Orthoses in the Management of Painful Rearfoot Deformity in Rheumatoid Arthritis

Debridement of plantar callosities in rheumatoid arthritis: a randomized controlled trial

Journal of Clinical Epidemiology

FOOTSTEP: a randomized controlled trial investigating the clinical and cost effectiveness of a patient self-management program for basic foot care in the elderly

Interventions For Foot Disease in Rheumatoid Arthritis: A Systematic Review

The BSR Annual Meeting, 2-6 May 2006, and the BHPR Spring Meeting, 3-4 May 2006

Title: A NEW CARE PATHWAY FOR MUSCULOSKELETAL FOOT HEALTH INTERFACE CLINICS BASED ON FIVE YEARS EXPERIENCE

Recipe for successful exploitation of the circumstances

- Advances in rheumatology have provided opportunity
- There is reasonable evidence for effectiveness of podiatry
- Carrying on the same is simply not an option
- Explore available levers
  - Policy e.g. NICE
  - Local e.g. patients /PPI
- Possible to incorporate structured, proactive approach to service redesign
  - Metrics
  - Care pathways, commissioning
  - Campaigning

Summary

- Forget all you thought you know - rheumatology has been turned on its head
- The system lags behind the potential

… but you can make a difference

- New paradigms of care allow much more proactive treatments
  - Consider a disease staged approach
  - Podiatry has a fundamental role in primary care
- Engage with commissioners

Further reading

- Helliwell, Woodburn, Redmond et al. The foot and ankle in RA: a comprehensive guide. Churchill Livingstone 2006
- Redmond and Helliwell. Musculoskeletal Disorders in Neale's Disorders of the Foot 8th Ed. Churchill Livingstone 2010
- Redmond, Helliwell & Robinson. Investigating foot and ankle problems. *In:* Conaghan et al; Oxford Specialist Handbook in Radiology: Musculoskeletal Imaging. Oxford University Press 2010
- PRCA/ARMA Standards of Care www.prcassoc.org.uk/standards-project
- NICE Guidelines
  OA- http://guidance.nice.org.uk/CG59
- RA- http://guidance.nice.org.uk/CG79