Management

- Restarted on SSZ and Prednisolone
- IA triamcinolone to both knees
- Tramadol* for pain relief
- Physiotherapy
- Occupational therapy - splints
ENTEROPATHIC ARTHRITIS
Enteropathic arthritis

- arthritis a/w chronic inflammatory bowel diseases – Ulcerative Colitis and Crohn’s disease

- other GI diseases with joint involvement – Whipple’s, coeliac, post-intestinal bypass surgery
Enteropathic arthritis

- most common extra-intestinal manifestations of IBD
- prevalence of 2-26%
- 2 patterns
  - axial involvement, including sacroiliitis +/- spondylitis
  - peripheral arthritis – 2 types
Peripheral arthritis

- prevalence in IBD between 5-20%
- higher incidence in CD than UC
- synovium: usually nonspecific inflammatory changes
  - villous hypertrophy, oedema, lymphohistiocytic infiltrates
  - granulomatous synovitis also described
Peripheral arthritis

- **Type 1**
  - pauciarticular, asymmetric, < 5 joints
  - mostly lower limbs
  - acute, self-limiting, lasts < 10 weeks
  - often coincides with exacerbations of IBD
  - strongly a/w extra-intestinal manifestations eg EN, uveitis
Peripheral arthritis

- **Type 2**
  - polyarticular, $\geq 5$ joints
  - usually persists for months or years
  - independent of activity of IBD
  - a/w uveitis but not with others
Peripheral arthritis

- seronegative
- typically non-deforming, non-erosive
- erosions of hips, elbows, MCP, MTP joints described
- differs from RA – predominantly asymmetric and pauciarticular
- evidence of reactive bone formation, little bone fusion
Relationship btw intestinal sx – peripheral arthritis

- usually concurrent with or after onset of bowel disease
- no relationship between duration of bowel disease and arthritis
- most frequent in extensive UC or CD affecting colon
- relationship between flares and severity of UC and episodes of arthritis
Relationship btw intestinal sx – peripheral arthritis

- surgical resection of diseased colon or total proctocolectomy for UC induces remission

- surgical removal of diseased part does **not** seem to affect course of arthritis in CD
Spondyloarthropathy

- encompasses axial sx, sacroiliitis, spondylitis, peripheral synovitis, dactylitis, enthesopathy

- axial involvement - identical to idiopathic AS or asymptomatic sacroiliitis
Spondyloarthropathy

- more common in CD than UC
- can occur at any age
- sex ratio 1 : 1
- overall, AS occurs in 3-12% IBD pts but radiological evidence of sacroiliitis more frequent 14-20%
Relationship btw intestinal sx – axial involvement

- course of IBD and axial involvement usually independent
- axial symptoms precede bowel disease by years
- extent, location, disease duration and development of complications do not affect progress of spondylitis or sacroiliitis
Pathogenesis

- exact mechanism unknown
- certain anaerobic bacteria (Bacteroides spp) linked
- increased mucosal permeability of gut
- proinflammatory mediators eg TNF-α, IFN-6
Pathogenesis - ‘gut iteropathy’ concept

- enhanced mucosal permeability & high levels of anaerobic bacteria colonizing inflammatory lesions in active IBD
  → absorption of proinflammatory bacterial components
  → stimulating pathologic immune response
Pathogenesis

- does not explain development of axial involvement in IBD

- NOD2 (CARD15) gene identified as important factor in CD is possible link between gut and joint inflammation
Genetics and HLA associations

- >90% pts with idiopathic AS a/w HLA-B27
- HLA-B27 in 50-70% IBD pts with AS and sacroiliitis
- Type 1 peripheral arthritis significantly a/w HLA-B27, also HLA-B35, DRB*103
- Type 2 peripheral arthritis a/w HLA-B44
Management

- Non-pharmacological
  - Rest, splints, physiotherapy

- Pharmacological
  - NSAIDs in spondyloarthropathy (but may exacerbate IBD)
  - Experience with COX-2 inhibitors in IBD limited
Management

- Peripheral arthritis
  - aim to control bowel inflammation as activity of arthritis parallels bowel activity
  - DMARDs
Management

- Sulphasalazine (SSZ)
  - poorly absorbed in small intestine, split by bacteria in colon
  - 5-aminosalicylic acid lowers colonic prostaglandin E and alters gut flora
  - Sulfapyridine antiarthritic
  - effects less clear in CD
Management

- SSZ
  - more effective in peripheral arthritis than axial
  - started if active joint or axial disease persist after 3 months
  - stopped if symptoms and signs of inflammatory arthritis absent for 6 months
Management

- Immunomodulators – methotrexate, azathioprine, 6-mercaptopurine
- Corticosteroids – systemic or intra-articular
- Antimicrobial agents
- Anticytokine therapy
- Apheresis
At present:

Soft stools 2x/d
- no blood or mucus
Gained 10 kg
Resumed menstruation
Able to stand unaided
Able to walk with frame
1. Hanauer SB. Inflammatory bowel disease: epidemiology, pathogenesis and therapeutic options. *Inflamm Bowel Dis*, Jan 2006; vol 12 S1
THANK YOU