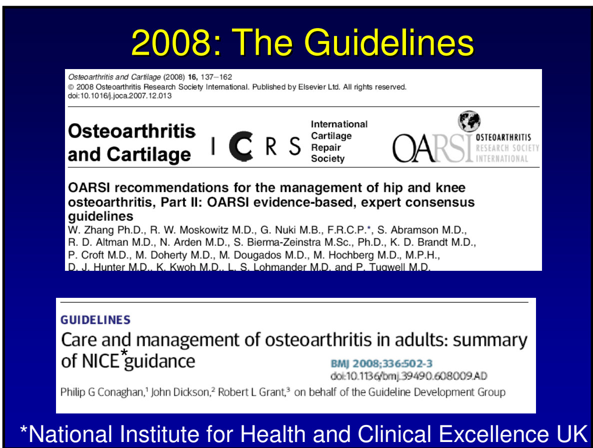
Overview

- Focus on 2008 guidelines
- Overview of methodological differences
- Where do they agree?
- Where do they disagree?
- Dissemination and implementation



NICE Acknowledgements

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OARSI vs NICE Differences in Methodology

OARSI vs NICE: Methodology

Therapy	OARSI 2008	NICE 2008
Target audience	+	+
Evidence-based	+	+
Literature	+	+
Expert opinion	+	+
Patient opinion	-	+
Evidence quality assessed	+	+
Strength of recommendations	+	-
Anatomical site specific	+	+/-
Health economics	-	+
Stakeholder consultation	+	+++
Research recommendations	-	+
Cost	+	+++
Declaration of conflicts	+	+

Differences in wording

- OARSI
  - "Intra-articular (IA) injections with corticosteroids can be used in the treatment of hip or knee OA, and should be considered particularly when patients have moderate to severe pain not responding satisfactorily to oral analgesic/anti-inflammatory agents and in patients with symptomatic knee OA with effusions or other physical signs of local inflammation"
- NICE
  - "Intra-articular corticosteroid injections should be considered as an adjunct to core treatment for the relief of moderate to severe pain in people with osteoarthritis"

OARSI vs NICE
What did they agree on?

Previous Guidelines

Level of evidence[†]	Agreement (number of guidelines recommending the modality/total number of guidelines addressing the modality)				
	<25%	25%–	50%–	75%–	100%
Ia	Ultrasound (1/5)	Chondroitin sulphate (2/7)	Heat/ice (7/10) Glucosamine sulphate (6/10) NSAID + H2-blockers (5/8)	NSAIDs (15/16) Insole (12/13)[‡] Braces (8/9)[‡] Topical capsaicin (8/9)[‡] IA HA (8/9)[‡] IA steroid (11/13)[‡] TENS (8/10) Topical NSAIDs (7/9)[‡]	Aerobic exercise (21/21) Strengthening exercise (21/21) Acetaminophen (16/16) Education (15/15) COX-2 inhibitors (11/11) Opioid (9/9) Self-management (8/8) Water-based exercise (8/8) NSAID + PPI (8/8) NSAID + misoprostol (8/8) Telephone (2/2)
Ib	Laser (1/6) Electrotherapy/EMG (1/8)	Nutrients (1/3)	Acupuncture (5/8) Massage (1/2) Diacerhein (1/2)	Weight loss (13/14) Patellar tape (12/13) Avocado soybean unsaponifiables (3/4)	Combination therapy (12/12) Joint lavage (3/3) Herbs (2/2)
III					TJR (14/14) Osteotomy (10/10)
IV	Oral steroid (0/2)			Arthroscopic debridement (5/6)	Cane/stick (11/11)[‡] Referral (5/5) Knee fusion (2/2)[‡] Knee aspiration (2/2)[‡]

Zhang et al Osteoarthritis Cartilage 2007;15:981-1000

OARSI vs NICE: Agreement

- Holistic approach
- Combination of non-pharmacological and pharmacological approach

Comparison of New Guidelines

Therapy	OARSI Hip/knee	NICE All sites
Education	+	+
Exercise	+	+
Weight loss	+	+
Hot/cold packs	+	+
Paracetamol	+	+
Topical NSAIDs	+	+
Oral NSAIDs	+	+
Opioids	+	+
Glucosamine et al.	+	-
Aids/braces/footware (site specific)	+	+
Acupuncture	+	?
Intra-articular corticosteroids	+	+
Intra-articular hyaluronans	+	-
Surgery – Lavage/debridement	?	-
Surgery – TJR/site specific	+	+

OARSI vs NICE
What didn't they agree on?

"It's a new anti-depressant—instead of swallowing it, you throw it at anyone who appears to be having a good time."

Not recommended by NICE (1)

- Telephone contact
- Topical rubefacients
  - Lack of efficacy data

Not recommended by NICE (2)

- Intra-articular hyaluronan injections
  - Multiple agents with differing clinical regimens
  - Heterogeneous results from large numbers of clinical trials; Cochrane review suggests benefits from 5-13 weeks after series of injections (Bellamy et al Cochrane Database 2006)
  - No good data on sub-groups with better response
  - Cost-consequence analysis looked at 3 most published products using estimates from individual trials
  - Cost-effectiveness too high

Not recommended by NICE (3)

- Chondroitin or glucosamine products
- Range of different products ?QC
- Chondroitin
  - Meta-analysis: "Large scale, methodologically sound trials indicate that the symptomatic benefit of chondroitin is minimal or non-existent"

(Reichenbach et al Ann Intern Med 2007)

Not recommended by NICE (4)

- Glucosamine (NB GH vs GS)
  - Meta-analysis: "…studies using a non-Rotta preparation or adequate concealment failed to show a benefit in pain…while those [with] Rotta…show that glucosamine was superior to placebo"

    (Towheed et al Cochrane Database Syst Rev 2005)
  - Large NIH GAIT trial: GH, chondroitin or combination did not reduce pain

    (Clegg et al N Engl J Med 2006)
  - GS not licensed in UK
  - cost consequence = wide range of ICERs
  - If people want to use, advise 3/12 trial of GS 1500mg

Not recommended by NICE (5)

- OARSI
  - "Acupuncture may be of symptomatic benefit in patients with knee OA"
- NICE
  - Acupuncture not strongly endorsed
  - "Electro-acupuncture should not be used to treat people with osteoarthritis"

NICE: HE Modelling

- An economic model was developed comparing treatment with NSAIDs and Cox-2s with and without coprescription of a PPI
- Different patient sub-groups were examined based on age, GI and CV risk factors
- Adverse event data was taken from the largest RCTs
  - CV (MI, Stroke, Heart Failure)
  - GI (Dyspepsia, Symptomatic Ulcer, PUBs)
- Economic analysis was performed in order to determine the cost effective treatment option for each patient group

NICE: HE Modelling (2)

- Results for high risk patients were similar
- Cox-2 plus PPI is the most expensive option – but also likely to be the safest

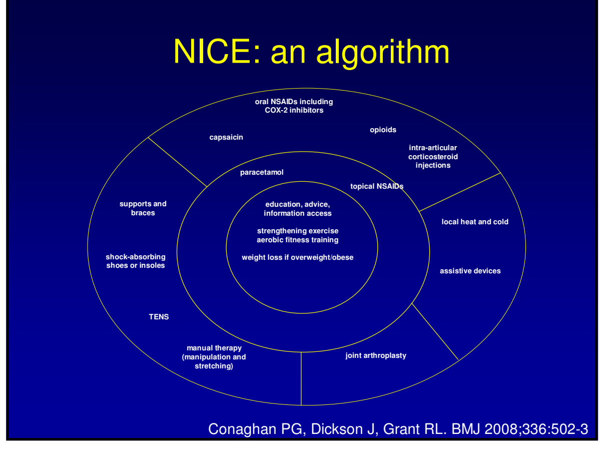
➔ PPIs should always be coprescribed with an NSAID or a Cox-2

➔ Treatment should be initiated at the lowest effective dose for the shortest possible period of time

➔ Results too close to make recommendations on individual NSAIDs and Cox-2s, other than a negative recommendation for etoricoxib 60mg

OARSI vs NICE Dissemination

NICE: an algorithm



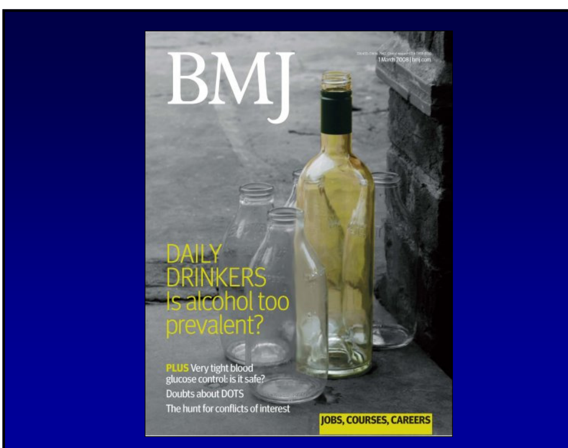
Conaghan PG, Dickson J, Grant RL. BMJ 2008;336:502-3

Dissemination

- OARSI
  - Presentation at Congress, publication, emails
- NICE
  - Presentation at meetings, publications, emails
  - NICE version 22 Pages
  - Quick reference guide 2 Pages
  - Full Guidance 319 Pages
  - Health Economics (appendix D) 48Pages

www.nice.org.uk/CG059

Implementation?



Problems with the evidence base

- "OA" vs joint pain
- Predominance of oral NSAID studies
- Knee >> hip >> hand
- Short-term
- Monotherapies
- Exclude co-morbidities
- Pain vs QoL as outcome

? generalisability

What do people with OA really do?

Community use in 466 pts, mean age 78

GP physio	6.9%
hospital physio	7.9
paracetamol	42.5
NSAIDs	45.5
cod liver oil	38.7
evening primrose oil	9
glucosamine	15.9
chondroitin	5.4

Jordan KM et al Rheumatology 2003;43:381

Summary

Summary

- Modern OA guidelines all agree!
- Differences relate to national/HE reasons
- Recommendations:
  - Holistic care
  - Combination of non-pharmacological and pharmacological approaches
- Are we getting the message to front line clinicians?

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