Presenting evidence

Overview

- Demonstrate how we present evidence

- How we elicit clinical and lay member opinion of these findings

Overview

In 'scoping a guideline' we demonstrated how interaction with GDG members at an early stage is important for instilling confidence and managing expectations.

Overview

During the development stage, the reviewer will be in contact with GDG chair and some GDG members on several occasions for more specific information such as

- timelines
- clinical significance
- equivalence
- applicability
- transferability

Overview

Once review is completed the full review, evidence table and excluded studies table are presented as follows;

- Sent to chair 3 weeks before GDG meeting
- Discussed with chair 2 weeks before GDG meeting
- Sent to GDG 1 week before GDG meeting
- Discussed at GDG meeting

Our expectations of the GDG

With training and support, we expect the GDG to be able to interpret the evidence in light of their collective / individual clinical and lay experience

Evidence reigns but experience-based opinion can over-rule findings.

At the GDG meeting

We present the evidence and review findings as the endpoint of the process

We typically present:

- The question as in scope
- The protocol agreed with GDG
- The GDG responses to our queries on the evidence with our feedback on implications
- The evidence and review findings

At the meeting

GDG realise implications of previous decisions eg outcomes, clinical significance etc

To combat this, at the first meeting, we try to present a straightforward review eg review of intervention versus placebo

Evidence table record

Bibliographic Information	Study Type & Evidence Level	Number of Patients/Characteristics	Intervention & Comparison	Dichotomous outcomes (E:C)	Continuous Outcomes (Mean:SD: N)
Author: Sisson T Year: 1971 Country: USA ID: [130]	Methodology: RCT Blinding: Not reported Randomisation: Coin toss Evidence level: 1-	*n*: 35 Inclusion: TSB > 162 micromol/litre Exclusion: Sepsis, Cephalhaematoma Massive ecchymosis Demographics: Gender (M/F) :16/19 Mean GA: Not reported Mean BW: 2567 ± 709 gms Age at entry to study: Not reported Mean TSB: 193 micromol/litre	Group 1: No treatment Group 2: Conventional phototherapy Conventional Phototherapy consisted of 10 (20 watt) fluorescent lamps Units were 45 cm above the baby and had a Plexiglas shields to block ultraviolet radiation. Canopies were vented so lamp heat was dissipated Babies removed for no more than 20 minutes a time for feeding etc Babies were naked except for eye shields and diapers Light band = 410 – 490 Phototherapy discontinued at TSB < 145 micromol/litre	ET: Group 1: 2/14 Group 2: 3/21 Treatment failure: Group 1: 9/16 Group 2: 2/19	TSB levels – change Incomplete data Mean change in TSB: Incomplete data Time to max TSB (hours): Incomplete data

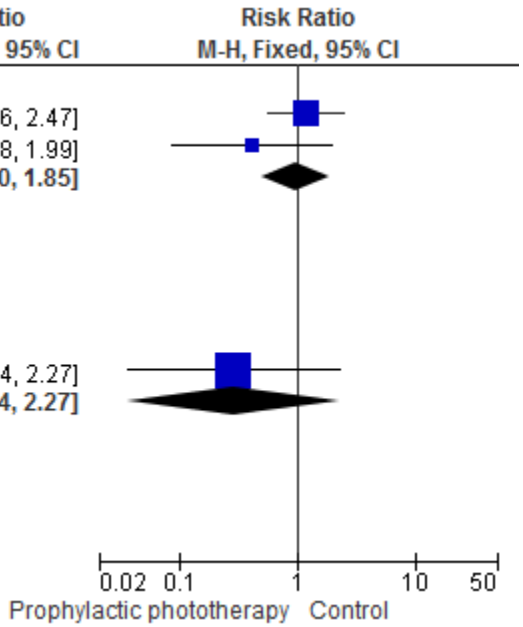
Excluded studies table

Phototherapy

Reference	Reason for exclusion
Amato M, Howald H, and von MG. Interruption of breast-feeding versus phototherapy as treatment of hyperbilirubinemia in full-term infants. *Helvetica Paediatrica Acta* 1985; 40:(2–3)127–31.	Not all babies received phototherapy
Boo NY and Chew EL. A randomised control trial of clingfilm for prevention of hypothermia in term infants during phototherapy. *Singapore Medical Journal* 2006; 47:(9)757–62.	Intervention to prevent hypothermia
Boo NY, Chee SC, and Rohana J. Randomized controlled study of the effects of different durations of light exposure on weight gain by preterm infants in a neonatal intensive care unit. *Acta Paediatrica* 2002; 91:(6)674–9.	No jaundice-related outcomes
Brown AK, Kim MH, Wu PY *et al*. Efficacy of phototherapy in prevention and management of neonatal hyperbilirubinemia. *Pediatrics* 1985; 75:(2 Pt 2)393–400.	Secondary publication of NICHHD study
Bryla DA. Randomized, controlled trial of phototherapy for neonatal hyperbilirubinemia. Development, design, and sample composition. *Pediatrics* 1985; 75:(2 Pt 2)387–92.	Secondary publication of NICHHD study
Costarino AT, Ennever JF, Baumgart S *et al*. Bilirubin photoisomerization in premature neonates under low- and high-dose phototherapy. *Pediatrics* 1985; 75:(3)519–22.	Not an RCT
Costarino AT, Jr., Ennever JF, Baumgart S *et al*. Effect of spectral distribution on isomerization of bilirubin in vivo. *Journal of Pediatrics* 1985; 107:(1)125–8.	Not an RCT
Donzelli GP, Moroni M, Pratesi S *et al*. Fibreoptic phototherapy in the management of jaundice in low birthweight neonates. *Acta Paediatrica* 1996; 85:(3)366–70.	Not an RCT
Eggert LD, Pollary RA, Folland DS *et al*. Home phototherapy treatment of neonatal jaundice. *Pediatrics* 1985; 76:(4)579–84.	Home phototherapy not relevant to this guideline
Elliott E, Moncrieff MW, and George WH. Phototherapy for hyperbilirubinaemia in low birthweight infants. *Archives of Disease in*	Not an RCT

Forest plots

Study or Subgroup	Prophylactic phototherapy Events	Total	Control Events	Total	Weight	Risk Ratio M-H, Fixed, 95% CI
1.3.1 All infants (birth weight < 2500 g)						
Brown 1985	14	325	13	356	71.6%	1.18 [0.56, 2.47]
Jangaard 2007	2	37	5	38	28.4%	0.41 [0.08, 1.99]
Subtotal (95% CI)		**362**		**394**	**100.0%**	**0.96 [0.50, 1.85]**
Total events	16		18			
Heterogeneity: Chi² = 1.41, df = 1 (P = 0.23); I² = 29%						
Test for overall effect: Z = 0.12 (P = 0.91)						
1.3.2 Birth weight < 1000 g						
Jangaard 2007	1	14	4	16	100.0%	0.29 [0.04, 2.27]
Subtotal (95% CI)		**14**		**16**	**100.0%**	**0.29 [0.04, 2.27]**
Total events	1		4			
Heterogeneity: Not applicable						
Test for overall effect: Z = 1.19 (P = 0.24)						



GRADE profile

Quality assessment							No of patients		Effect		Quality
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Prophylactic phototherapy versus control	Control	Relative (95% CI)	Absolute	
Cerebral palsy - All infants (birth weight < 2500 g)											
2	randomised trials	no serious risk of bias[1]	no serious inconsistency[2]	no serious indirectness[3]	Serious[4]	none	16/362 (4.4%)	18/394 (4.6%)	RR 0.96 (0.5 to 1.85)	2 fewer per 1000 (from 23 fewer to 39 more)	MODERATE
Cerebral palsy - Birth weight < 1000 g											
1	randomised trials	no serious risk of bias[1]	no serious inconsistency[5]	no serious indirectness[3]	Serious[4]	none	1/14 (7.1%)	4/16 (25%)	RR 0.29 (0.04 to 2.27)	178 fewer per 1000 (from 240 fewer to 317 more)	MODERATE

Evidence summary

Text specified in template and subdivided into following sections

- Review question
- Review introduction
- Description of included studies
- Evidence profile
- Evidence statements
- Health economics profile
- Evidence to recommendations

Role-play

- Think about what questions you would ask
- What other information would you like to have
- For you, what outcomes evidence would have most influence on recommendations.

Feedback

What did you think of the evidence in its entirety?

Do you think we should recommend prophylactic phototherapy?

What influenced your decision?.

"Take home points"

Presenting evidence

- ❑ Is hard to pitch right
- ❑ can raise more questions than it answers
- ❑ begin simple and revisit whole process from scope to findings

Your thoughts

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