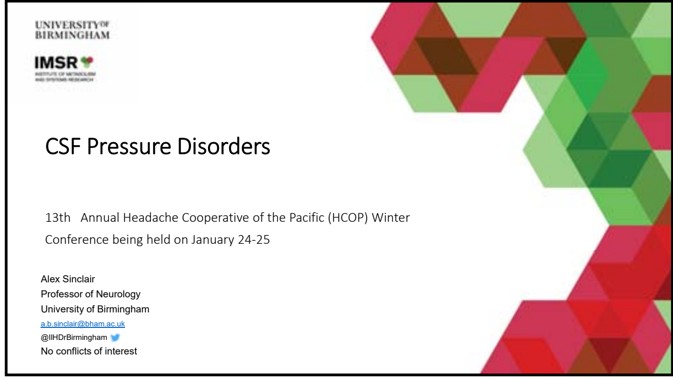

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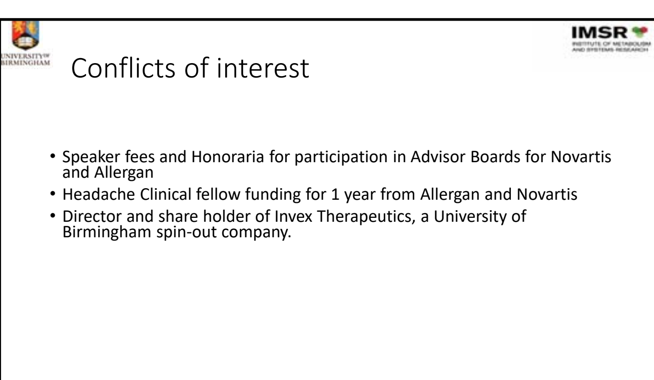

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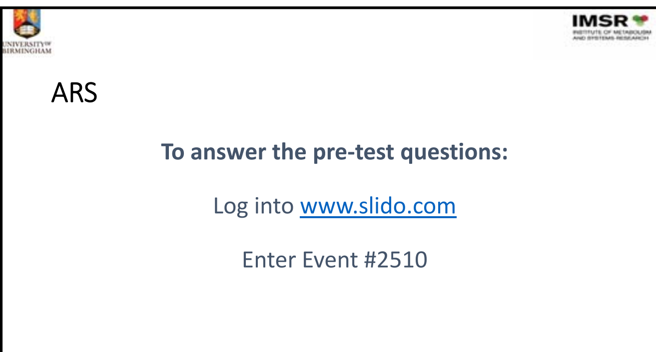

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IMSR

Pre-Test Question #1

Is a lumbar puncture opening pressure > 25 cm CSF alone always consistent with a diagnosis of Idiopathic Intracranial Hypertension (IIH)?

A. Yes
B. No, papilloedema must be confirmed and a secondary cause excluded
C. Yes, once a secondary cause is excluded
D. I don't know

4

IMSR

Pre-Test Question #2

Is CSF shunting a useful therapy for headache in IIH?

A. Yes
B. Not in the majority
C. Only lumboperitoneal shunting is helpful
D. I don't know

5

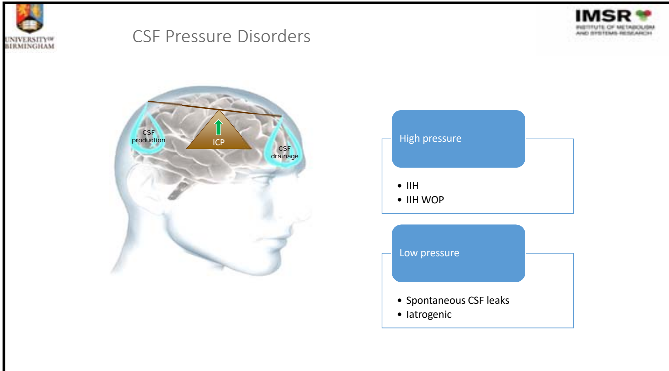
IMSR

Pre-Test Question #3

What is the proposed mechanism of action of Glucagon like peptide 1 (GLP-1) receptor agonists to treat IIH?

A. By suppressing appetite
B. By directly reducing cerebrospinal fluid secretion at the choroid plexus
C. Both thought suppressing appetite and by directly reducing cerebrospinal fluid secretion at the choroid plexus
D. I don't know

6



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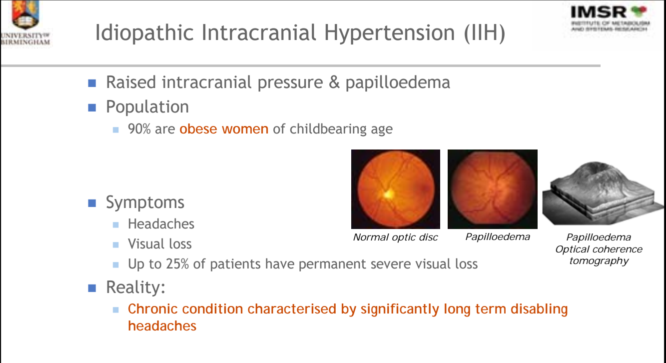

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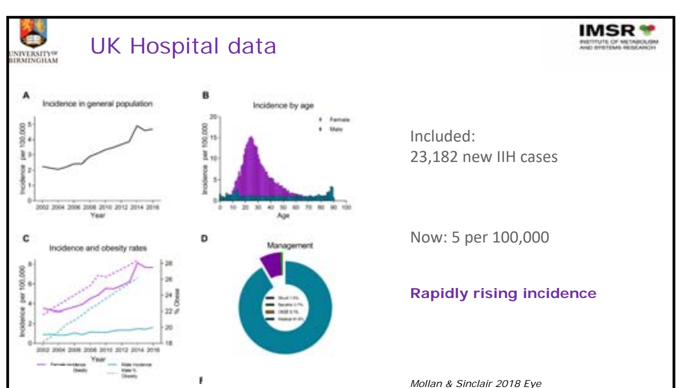

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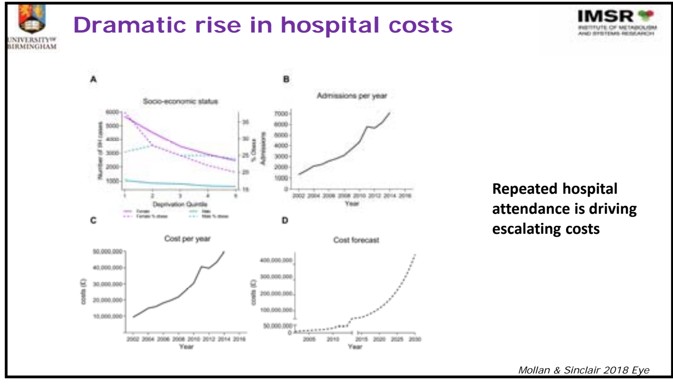

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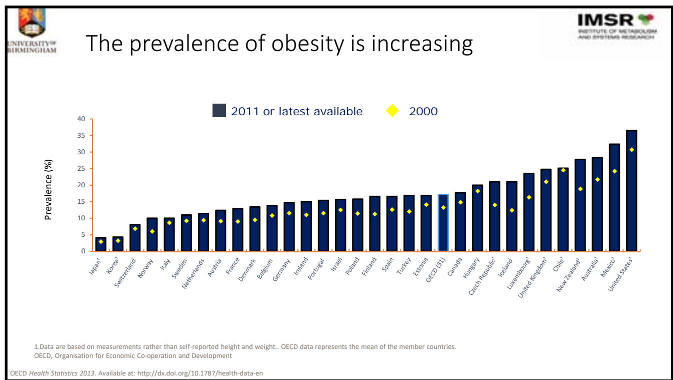

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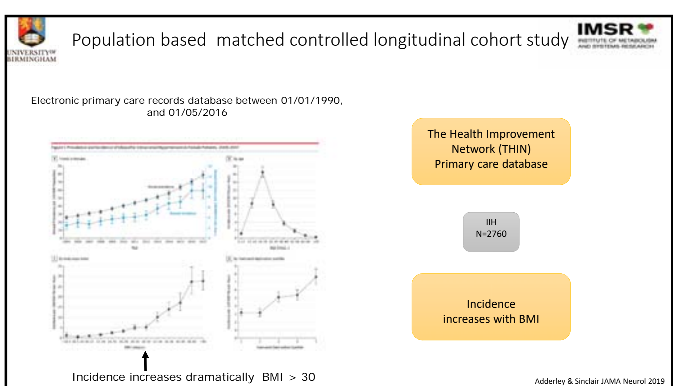

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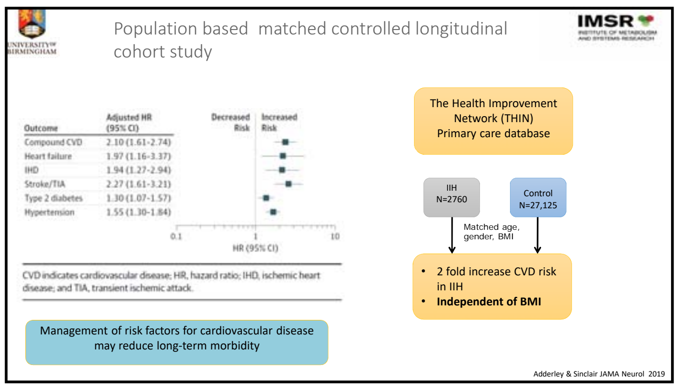

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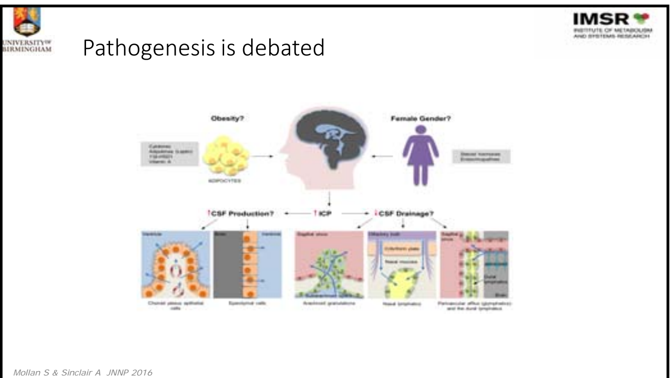

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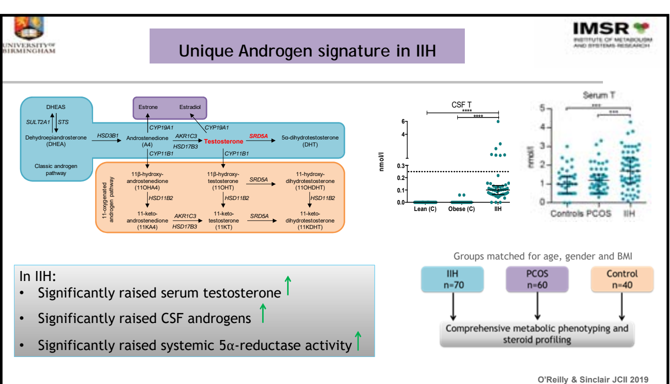

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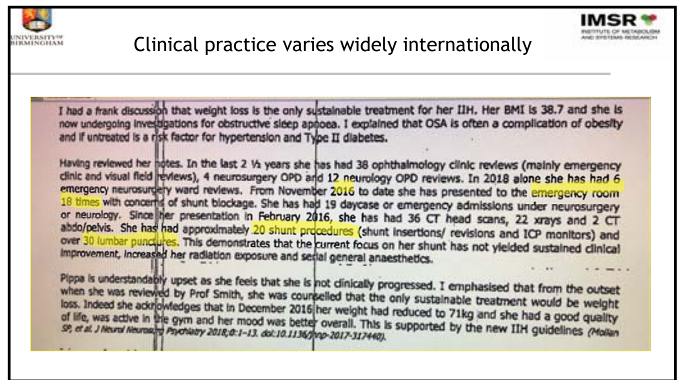
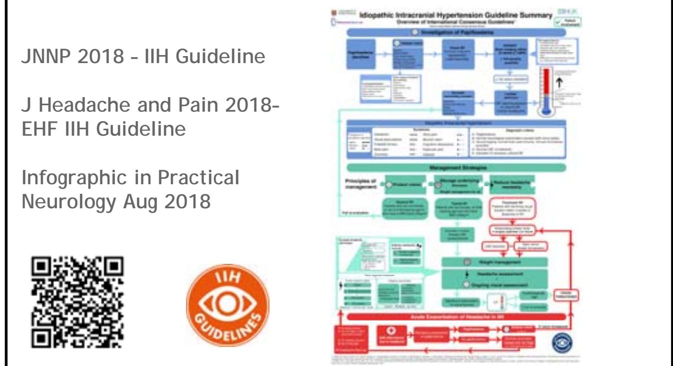


I had a frank discussion that weight loss is the only sustainable treatment for her IIH. Her BMI is 38.7 and she is now undergoing investigations for obstructive sleep apnoea. I explained that OSA is often a complication of obesity and if untreated is a risk factor for hypertension and Type II diabetes.

Having reviewed her notes. In the last 2 ½ years she has had 38 ophthalmology clinic reviews (mainly emergency clinic and visual field reviews), 4 neurosurgery OPD and 12 neurology OPD reviews. In 2018 alone she has had 6 emergency neurosurgery ward reviews. From November 2016 to date she has presented to the emergency room 18 times with concerns of shunt blockage. She has had 19 daycase or emergency admissions under neurosurgery or neurology. Since her presentation in February 2016, she has had 36 CT head scans, 22 xrays and 2 CT abdo/pelvis. She has had approximately 20 shunt procedures (shunt insertions/ revisions and ICP monitors) and over 30 lumbar punctures. This demonstrates that the current focus on her shunt has not yielded sustained clinical improvement, increased her radiation exposure and serial general anaesthetics.

Pippa is understandably upset as she feels that she is not clinically progressed. I emphasised that from the outset when she was reviewed by Prof Smith, she was counselled that the only sustainable treatment would be weight loss. Indeed she acknowledges that in December 2016 her weight had reduced to 71kg and she had a good quality of life, was active in the gym and her mood was better overall. This is supported by the new IIH guidelines *(Mollan SP, et al. J Neurol Neurosurg Psychiatry 2018;0:1–13. doi:10.1136/jnnp-2017-317440).*

16



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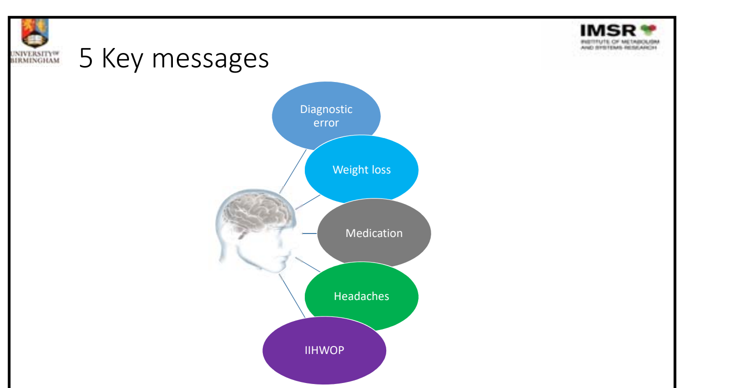

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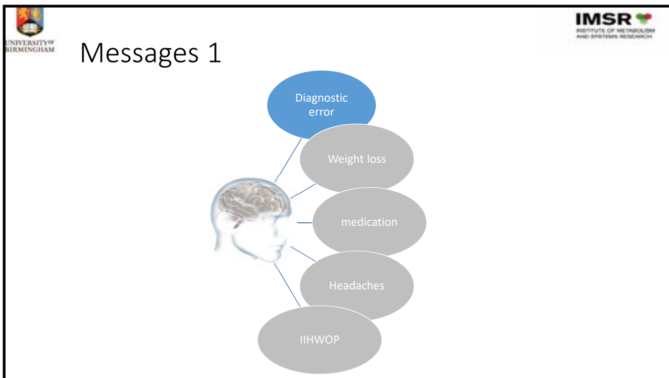
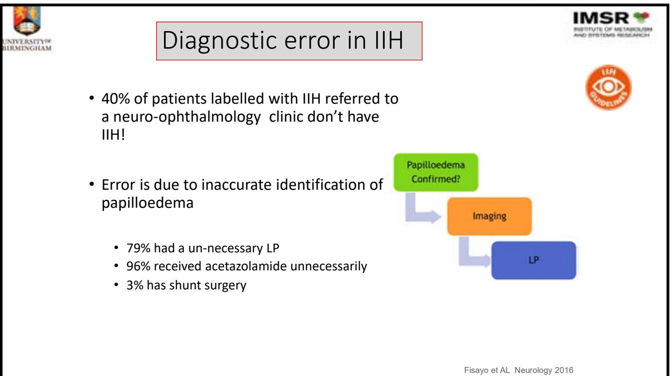
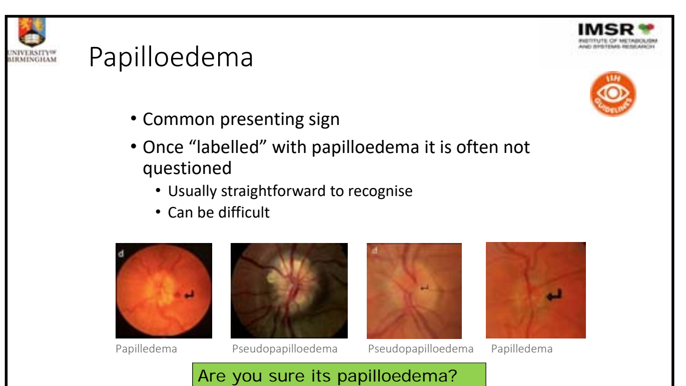
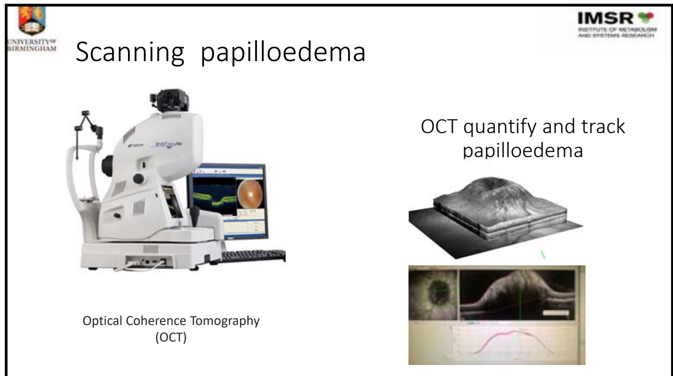

Messages 1
Diagnostic error
Weight loss
medication
Headaches
IIHWOP


Diagnostic error in IIH
40% of patients labelled with IIH referred to a neuro-ophthalmology clinic don't have IIH!
Error is due to inaccurate identification of papilloedema
79% had a un-necessary LP
96% received acetazolamide unnecessarily
3% has shunt surgery
Papilloedema Confirmed?
Imaging
LP
Fisayo et AL Neurology 2016


Papilloedema
Common presenting sign
Once "labelled" with papilloedema it is often not questioned
Usually straightforward to recognise
Can be difficult
Papilledema
Pseudopapilloedema
Pseudopapilloedema
Papilledema
Are you sure its papilloedema?



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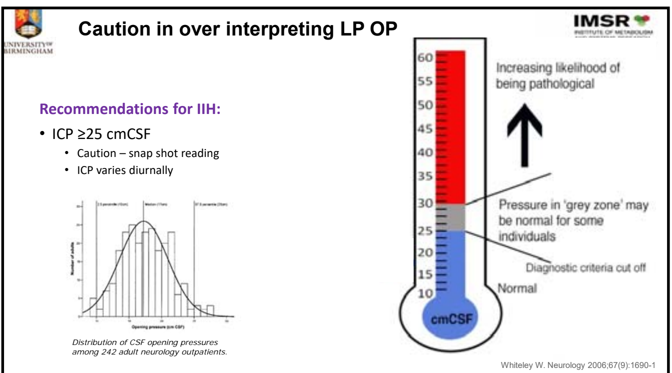

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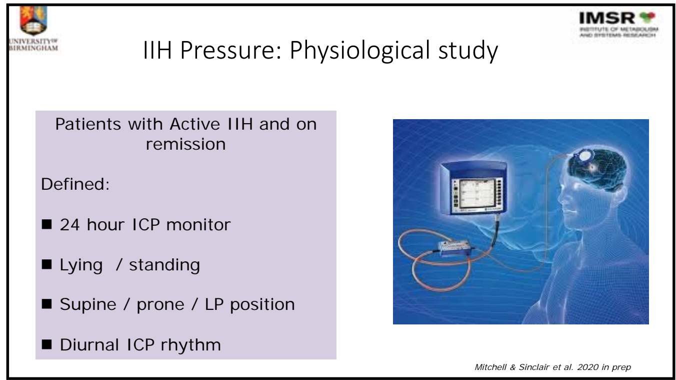

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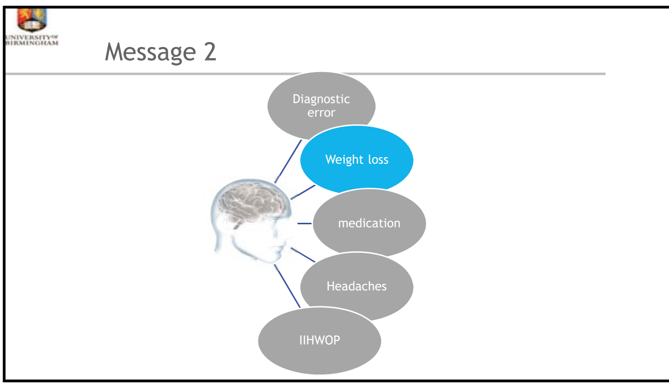

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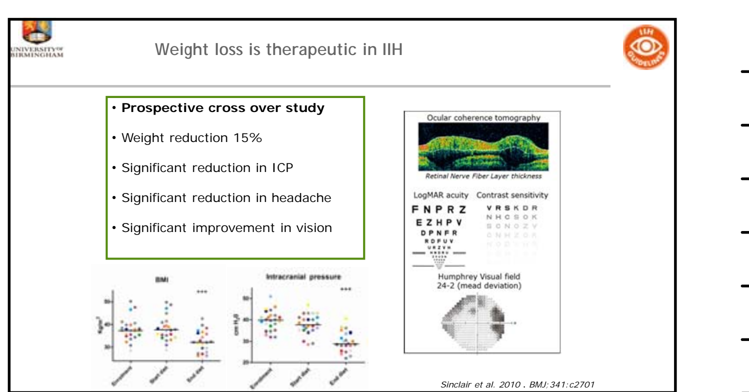

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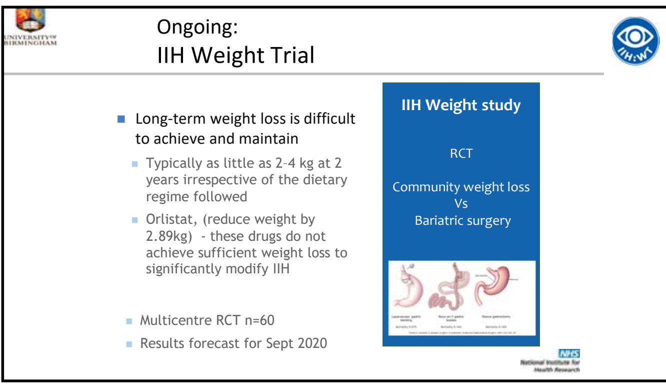

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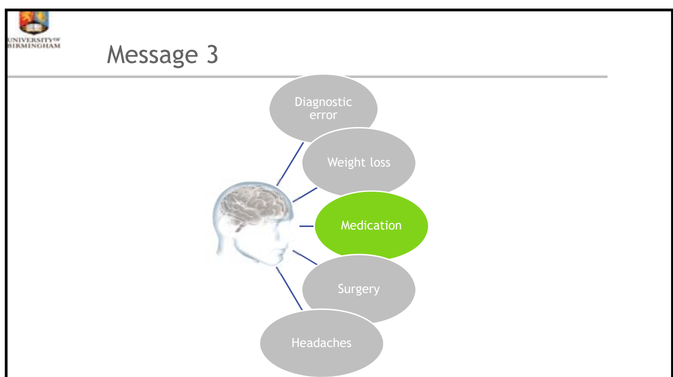

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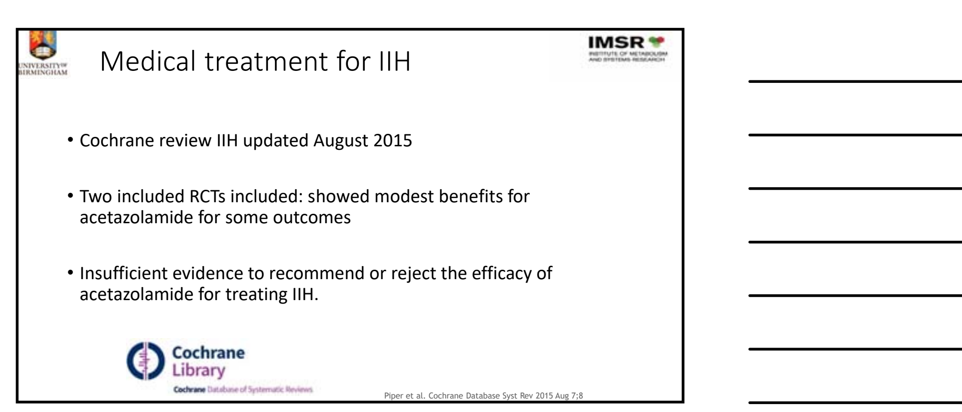

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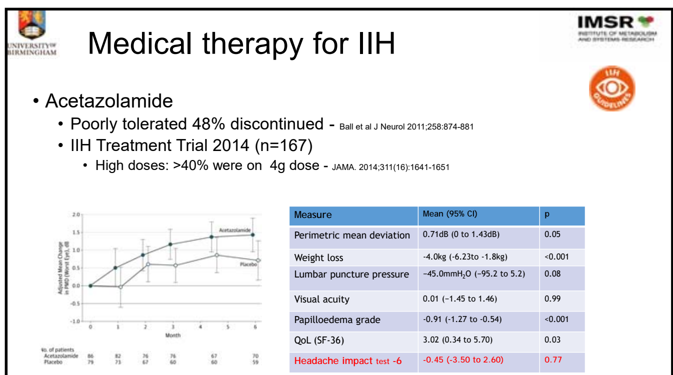

Measure	Mean (95% CI)	p
Perimetric mean deviation	0.71dB (0 to 1.43dB)	0.05
Weight loss	-4.0kg (-6.23to -1.8kg)	<0.001
Lumbar puncture pressure	−45.0mmH_2O (−95.2 to 5.2)	0.08
Visual acuity	0.01 (−1.45 to 1.46)	0.99
Papilloedema grade	-0.91 (-1.27 to -0.54)	<0.001
QoL (SF-36)	3.02 (0.34 to 5.70)	0.03
Headache impact test -6	-0.45 (-3.50 to 2.60)	0.77

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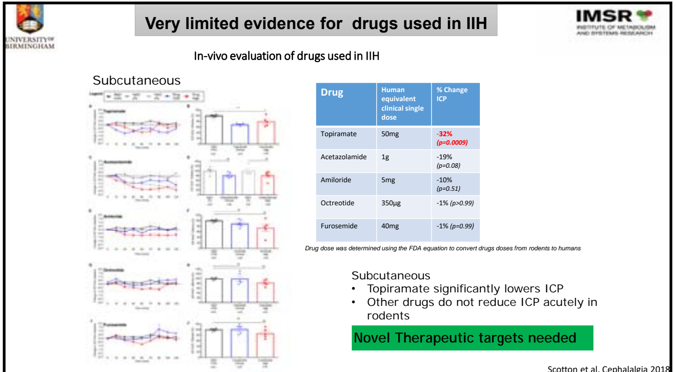

Drug	Human equivalent clinical single dose	% Change ICP
Topiramate	50mg	-32% (p=0.0009)
Acetazolamide	1g	-19% (p=0.08)
Amiloride	5mg	-10% (p=0.51)
Octreotide	350µg	-1% (p>0.99)
Furosemide	40mg	-1% (p=0.99)

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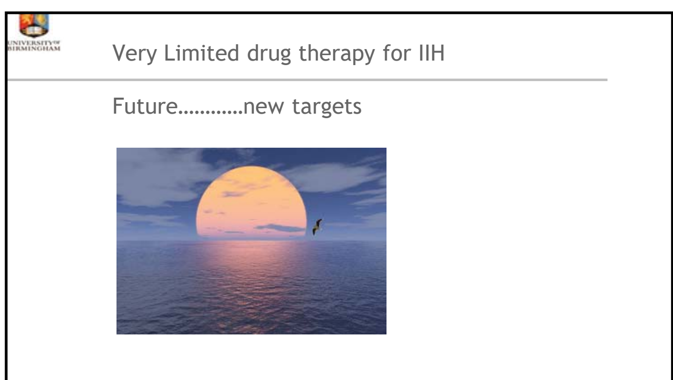

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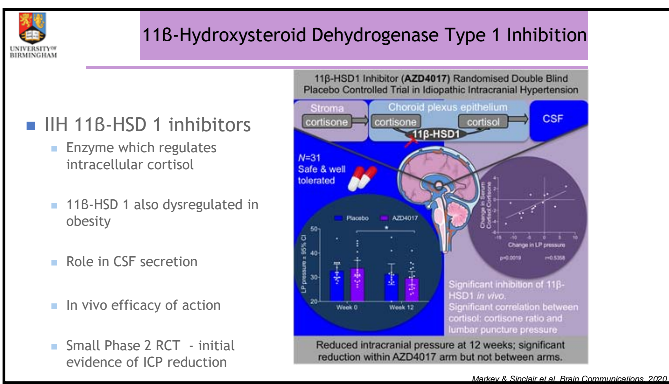

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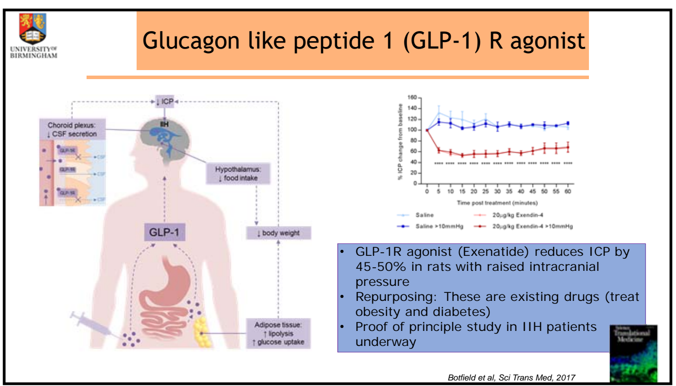

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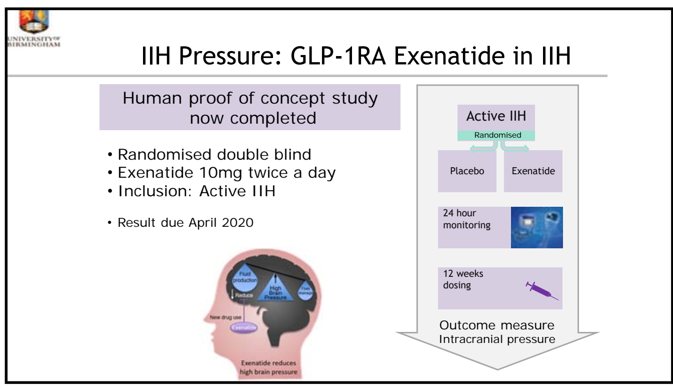

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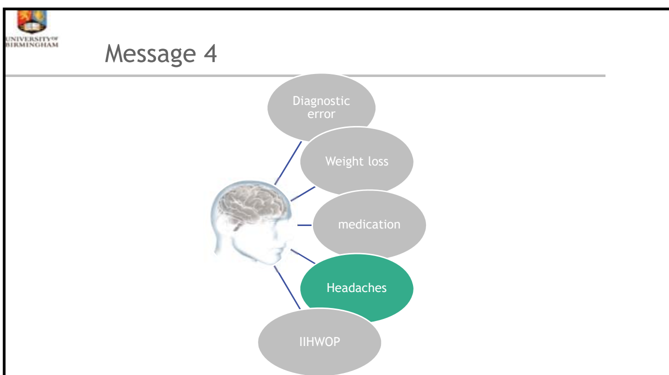

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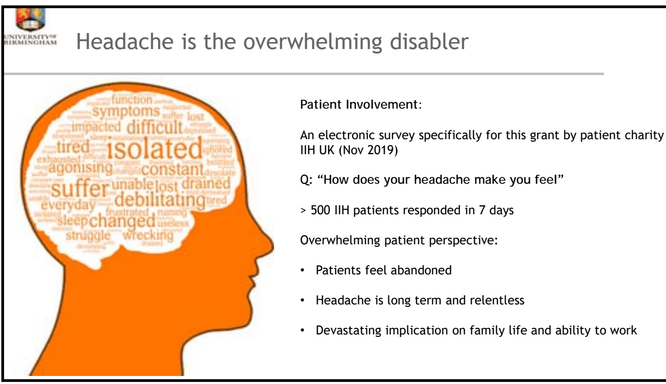

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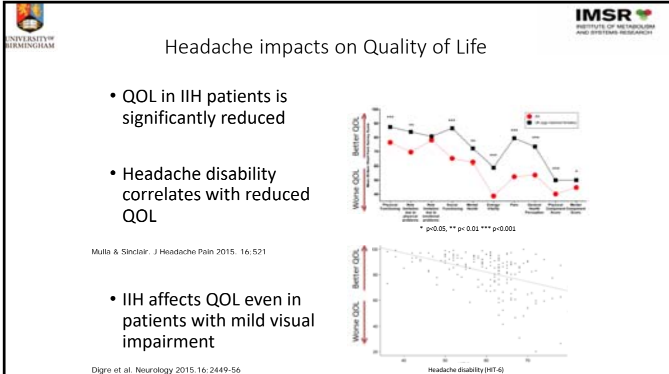

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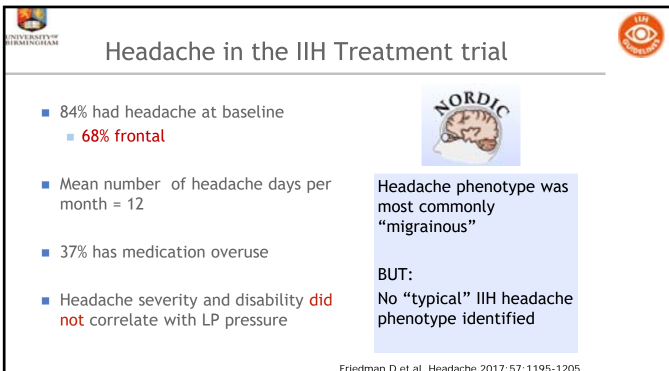

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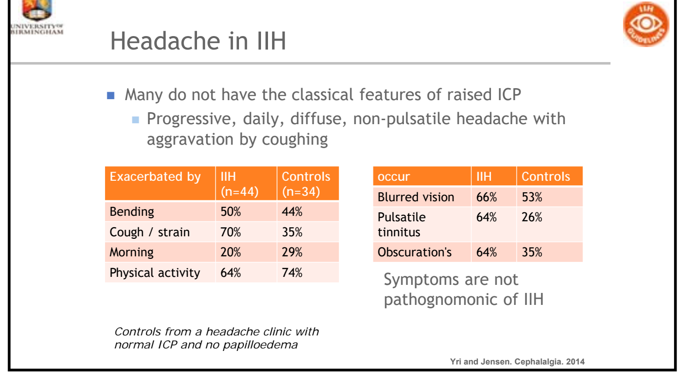
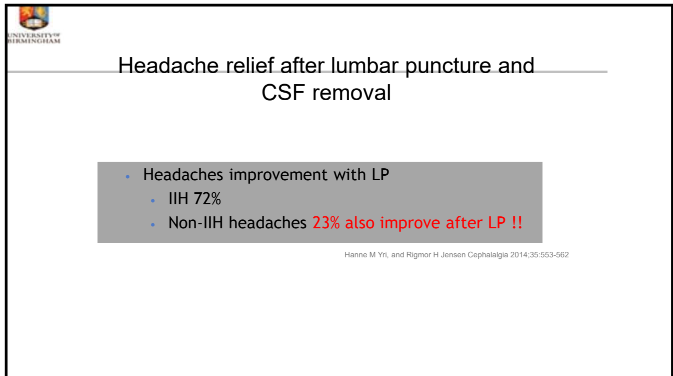


Exacerbated by	IIH (n=44)	Controls (n=34)
Bending	50%	44%
Cough / strain	70%	35%
Morning	20%	29%
Physical activity	64%	74%

occur	IIH	Controls
Blurred vision	66%	53%
Pulsatile tinnitus	64%	26%
Obscuration's	64%	35%

42



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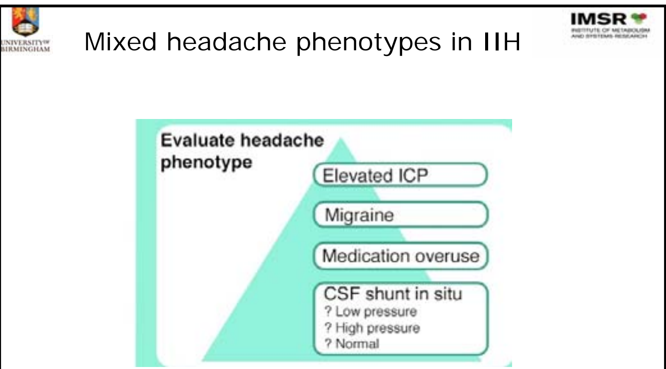

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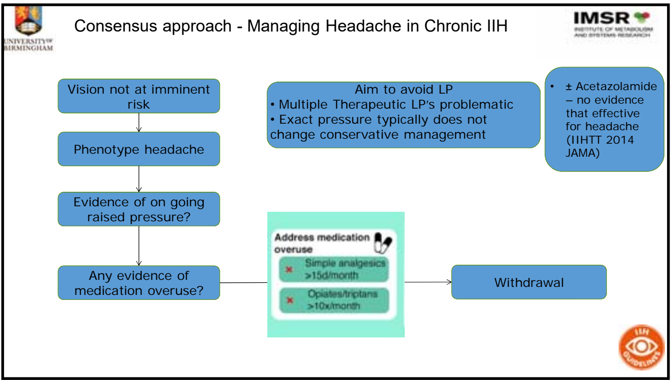

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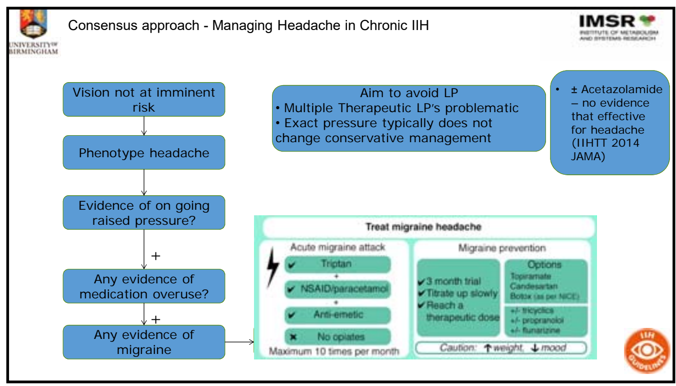

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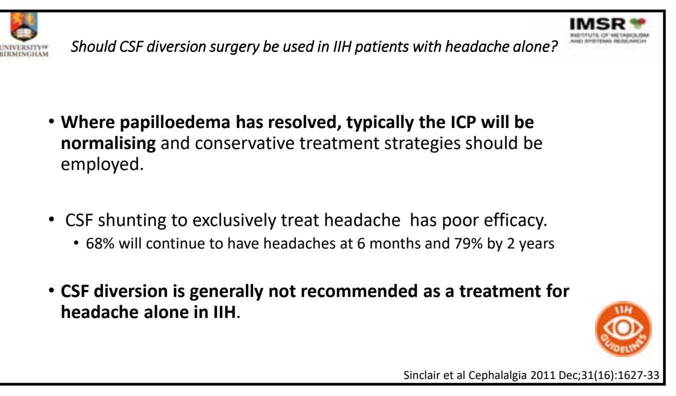

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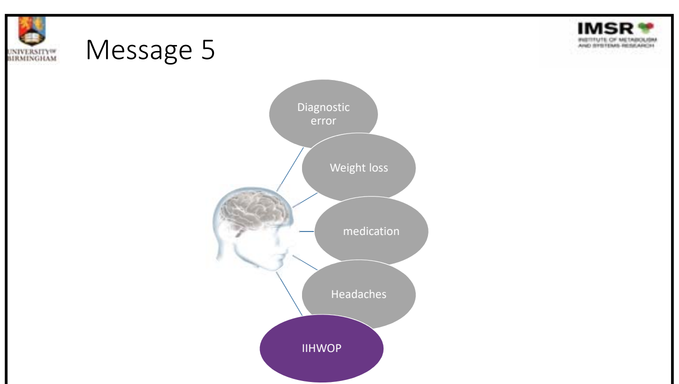

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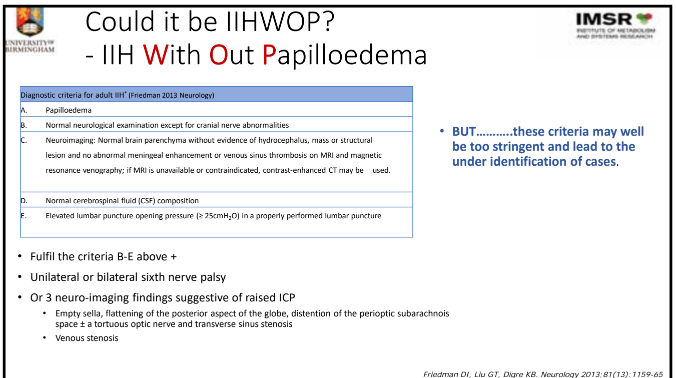

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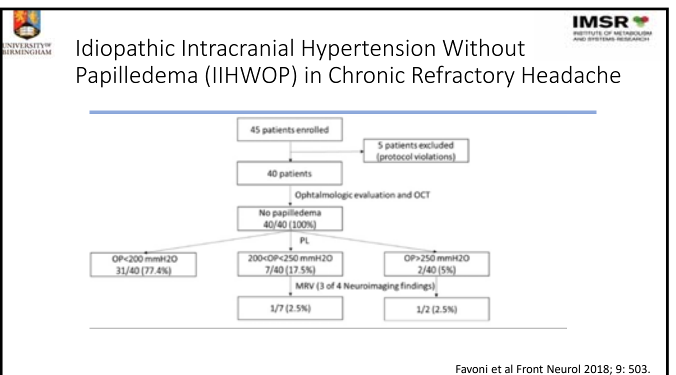

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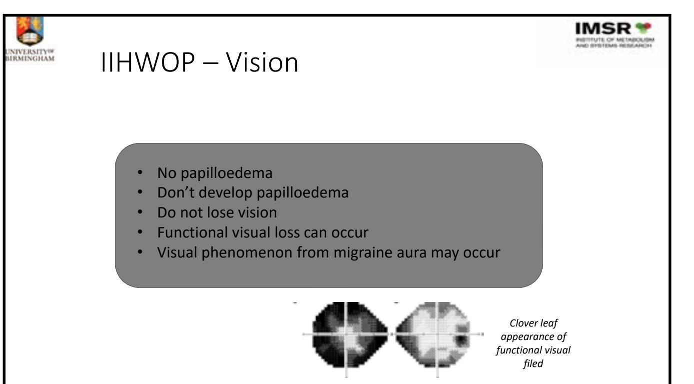

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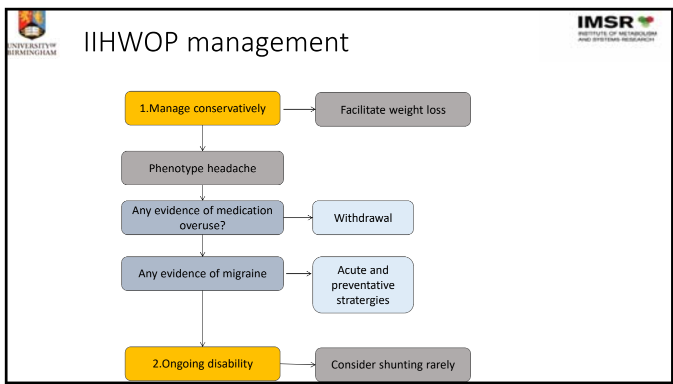

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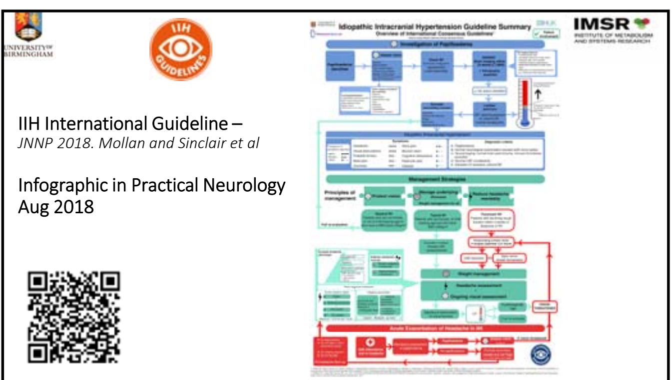

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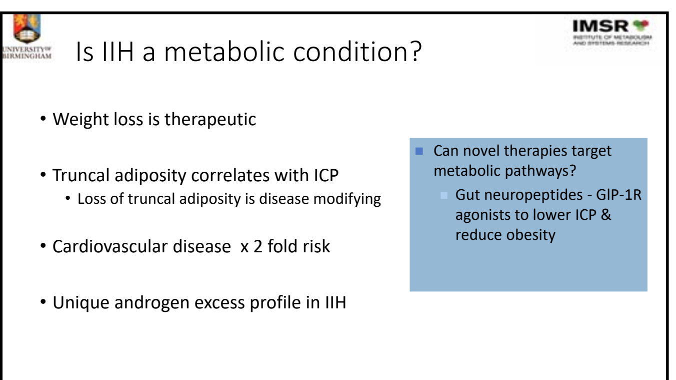

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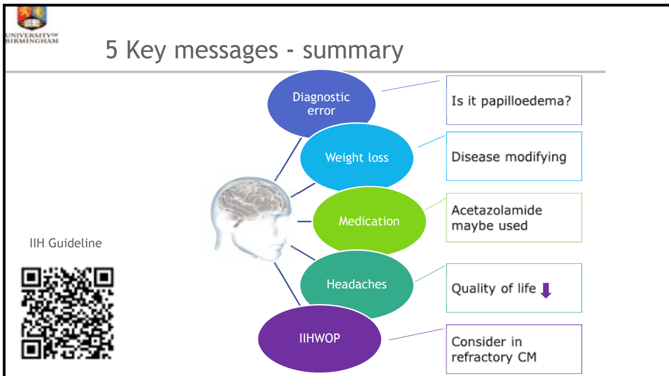

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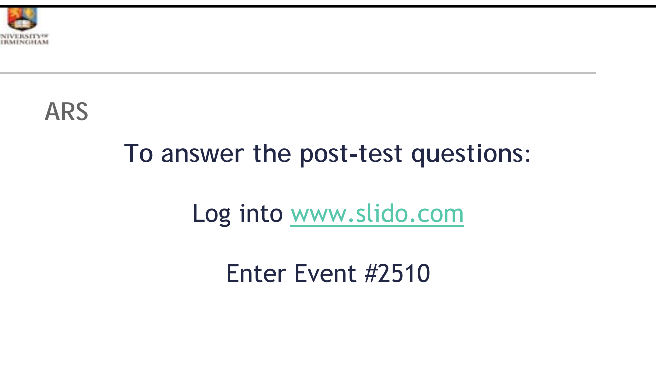

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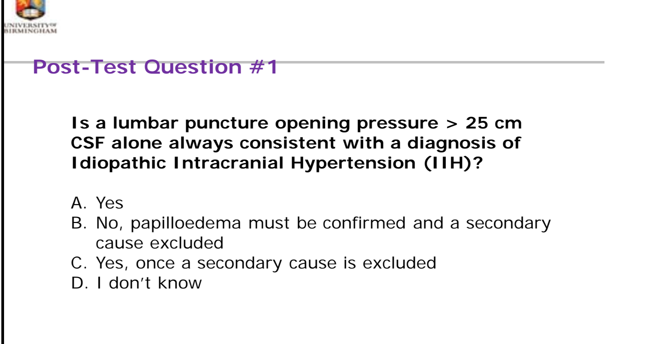

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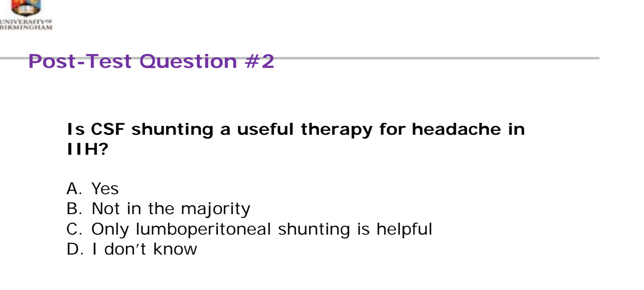

Post-Test Question #2

Is CSF shunting a useful therapy for headache in IIH?

A. Yes
B. Not in the majority
C. Only lumboperitoneal shunting is helpful
D. I don’t know

58

Post-Test Question #3

What is the proposed mechanism of action of Glucagon like peptide 1 (GLP-1) receptor agonists to treat IIH?

A. By suppressing appetite
B. By directly reducing cerebrospinal fluid secretion at the choroid plexus
C. Both thought suppressing appetite and by directly reducing cerebrospinal fluid secretion at the choroid plexus
D. I don’t know

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