

Identification of the midline in late pregnancy in obese and non-obese women

**M Butcher, R George, J Ip, J Campbell,
SM Yentis**

**Magill Dept of Anaesthesia
Chelsea and Westminster Hospital, London, UK**

Introduction

- Midline usually identified by palpation
- Other methods:
 - ultrasound
 - self-identification
 - “is this in the middle?”

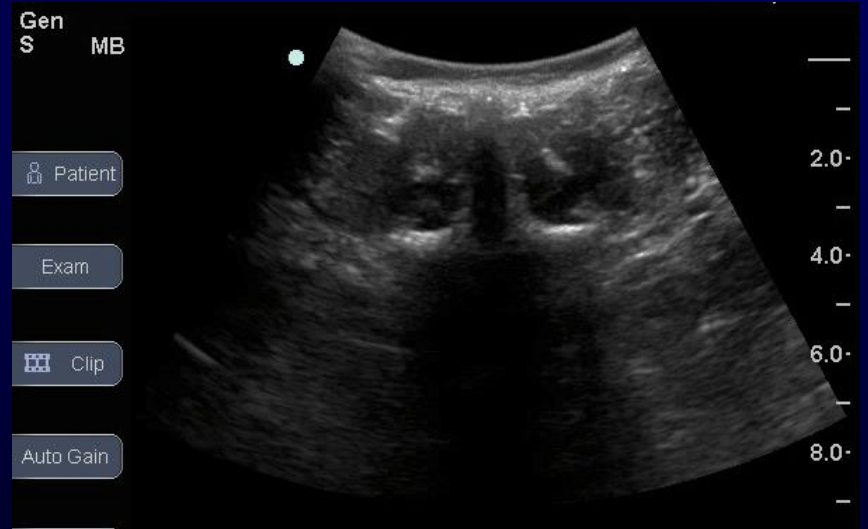
Aim

- To assess the accuracy of identification of the midline using:
 - self-identification
 - pin-prick discriminationwith reference to true midline (by USS)

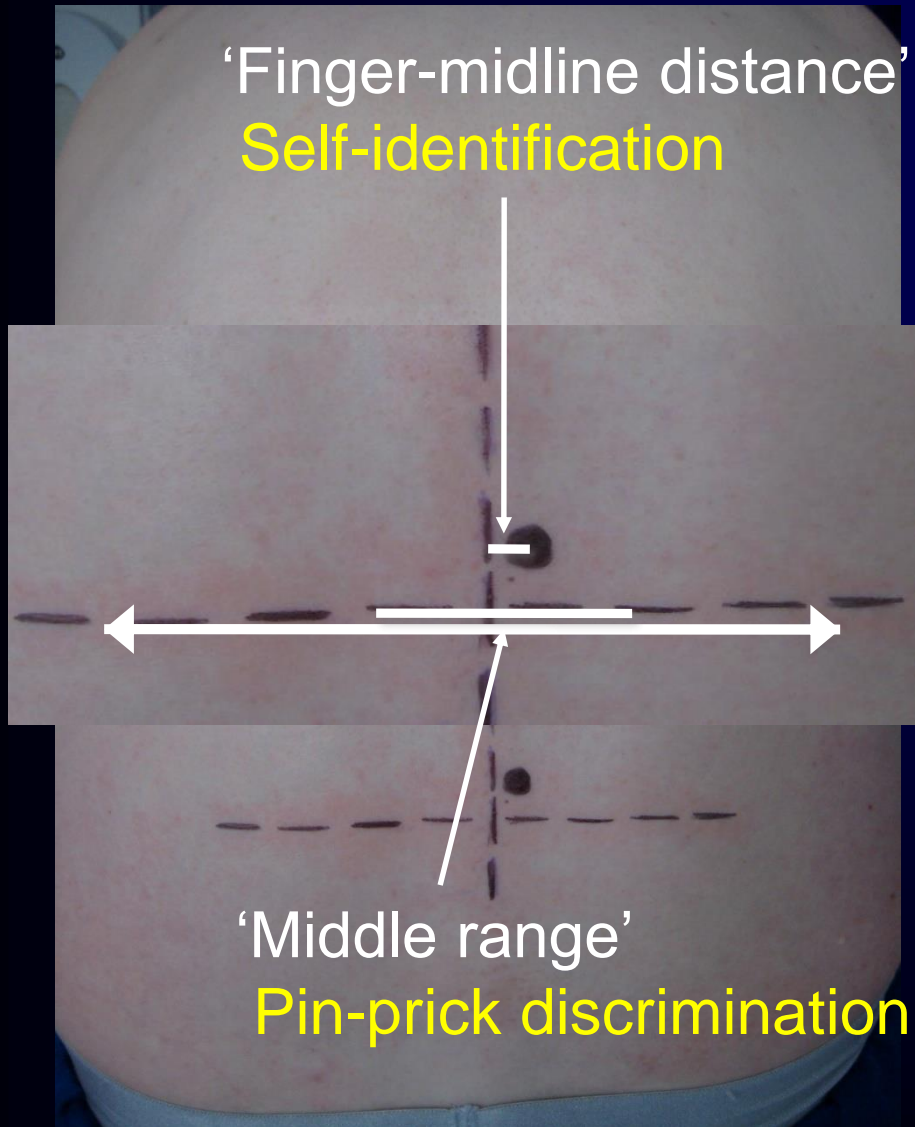
Methods

- REC approval, informed consent ($n = 50$)
- Inclusion criteria:
 - healthy women
 - BMI < 30 kg/m² ($n = 25$) [OAA 2012]
 - BMI ≥ 30 kg/m² ($n = 25$)
 - gestation ≥ 36 weeks

Methods



Methods



Results

	Obese	Non-obese	<i>P</i> value
BMI (kg.m ⁻²)			
Gestation (weeks)			
Within 5 mm of midline			
Finger-midline distance (mm)			
Discrimination range (mm)			

Mean (SD), no. (proportion) or median (IQR [range])

Results

	Obese	Non-obese	<i>P</i> value
BMI (kg.m ⁻²)	39.6 (7.7)	22.0 (1.8)	< 0.0001
Gestation (weeks)	37.6 (1.4)	38.4 (1.0)	0.04
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Within 5 mm of midline	13 (52%)	21 (84%)	0.03
Finger-midline distance (mm)			
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Within 5 mm of midline	13 (52%)	21 (84%)	0.03
Finger-midline distance (mm)	5 (5-10 [0-10])	2 (0-5 [0-12])	0.007
Discrimination range (mm)			

Mean (SD), no. (proportion) or median (IQR [range])

Results

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Discrimination range (mm)	33 (25-45 [3-85])	18 (13-25 [8-40])	< 0.0001

Mean (SD), no. (proportion) or median (IQR [range])

Conclusion

- Obese women:
 - less accurate at identifying and discriminating the middle of their back
- But:
 - they may be helpful in situations of difficult central neuraxial blockade

Conclusion

- Caveats:
 - superficial pinprick vs deeper needle insertion
 - local anaesthetic
 - epidural vs spinal needle