

Nuchal translucency

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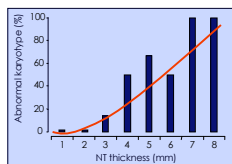
- The skin is ... too large for the body ...
- The nose is small.
- The face is flat.....

'Observations on an ethnic classification of idiots'
Langdon Down 1866

Screening by ultrasound



Scan before CVS/Amnio for age at 10-13⁺ wks (n=827)

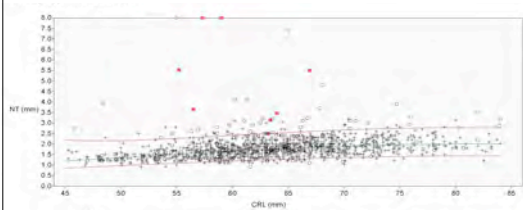


Measuring NT

	Before training	After training
No. of operators	4	4
Gestational age (by CRL)	1176	1037
Technique for measurement	No standard	FMF description
Risk cut-off	≥ 3 mm	≥ 1 in 100 / 300
Detection rate (chrom abs)	30%	76% / 84%

Monni et al. Lancet 1997

Ongoing audit NT measurements at RPA



From 01 Jan 2009 (n=1271):
Median = 53.4%
95th centile = 6.0%

NT in Australia

	ACT	NSW	NT	SA	TAS	QLD	VIC	WA	TOTAL
July 2001 – June 2002	4	68	0	5	3	29	45	31	184
July 2002 – June 2003	0	79	0	5	5	38	58	32	217
July 2003 – June 2004	6	91	0	12	6	52	69	33	267
July 2004 – June 2005	7	91	0	8	8	68	66	34	282
July 2005 – June 2006	10	116	0	9	8	79	77	36	335
July 2006 – June 2007	13	137	1	11	8	96	92	40	398
July 2007 – June 2008	18	163	1	13	7	124	100	51	477
Total Births in 2007*	4753	89495	3894	19662	6662	61249	70313	29164	285192
Births per accredited operator	264	549	3894	1512	951	493	703	572	598

Nisbet et al. Submitted



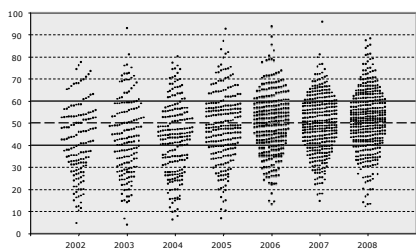
NT in Australia: how many scans do people perform?

	≤ 10	10-29	30-199	≥ 200	TOTAL
2002	13 (7%)	21 (11%)	87 (47%)	63 (34%)	184
2003	16 (7%)	33 (15%)	90 (41%)	78 (36%)	217
2004	16 (6%)	33 (12%)	120 (45%)	98 (37%)	267
2005	12 (4%)	23 (8%)	142 (50%)	105 (37%)	282
2006	14 (4%)	28 (8%)	164 (49%)	129 (39%)	335
2007	25 (6%)	27 (8%)	181 (45%)	165 (42%)	398
2008	24 (5%)	44 (9%)	224 (47%)	185 (39%)	477

Nisbet et al. Submitted



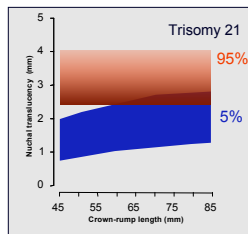
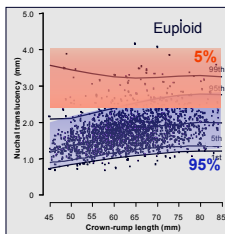
NT in Australia: operator performance



Nisbet et al. Submitted



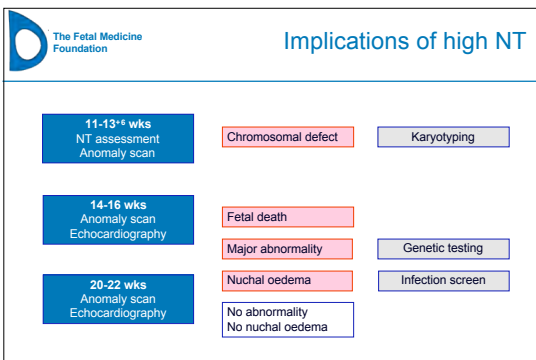
Nuchal translucency



The Fetal Medicine Foundation

Inc NT / Long Term Outcome

Author	Method of assessment	Age	NT cut-off	Developmental delay
Van Vugt et al 1998	Questionnaire	7-75 mths	3.0 mm	0 / 34
Adekunle et al 1999	Questionnaire	12-38 mths	4.0 mm	2 / 31(6.5)
Maymon et al 2000	Phone interview	12-36 mths	95 th centile	0 / 36
Sub-total				2/104 (2.0%)
Brady et al 1998	Clinical exam	6-42 mths	3.5 mm	1 / 89 (1.12)
Hippala et al 2001	Clinical exam	24-84 mths	3.0 mm	1 / 50 (2.0)
Senat et al 2002	Clinical exam	12-72 mths	4.0 mm	3 / 54 (5.6)
Cheng et al 2004	Clinical exam	8-30 mths	3.0 mm	1 / 14 (7.14)
Sub-total				6/207 (3.9%)
Total				8 / 308 (2.6%)



The Fetal Medicine Foundation

FMF Software for screening at 11-13⁺ wks

Certificates of competence

- Nuchal translucency
- Nasal bone
- Facial angle
- Tricuspid flow
- Ductus venosus flow
- Uterine artery flow

- Internet based course
 - 20 languages
 - Free of charge
 - 3-4 hours
 - Similar for patients
- Upload 3 images
- New license every yr
 - 3 images
 - Distribution of NT

www.fetalmedicine.com
