

holakoin@sina.tums.ac.ir :

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OR= / (/)CH

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Beardsall and)

Ogilvy Stuart 2004; Gillam and Kopp 2001;
(Jones et al. 2006

(Fisher 2007) (*Ectopic gland*)

et al. 2002; Law 1998; Medda et al. 2005; (T4)
(Miyai et al.2005; Waller et al. 2000
CH

Kopp)

(2002

(Law 1998)

CH

(Delavari et al. 2007)

(Hashem Pour 2004)

(Ordookhani etal. 2001)

Jones) .

et al. 1991; Karamizadeh and Amirhakimi
(2007

mμ/L

TSH

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T4 TSH
T4<6.5 TSH>10

Ordookhani etal.) / /
(2003

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Kurinczuk)

mμ/L

TSH

Power Analysis

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Brown and Demmer 1987;)

Castanet et al. 2000; Devos et al. 1984;

Perna et al. 2007; Van et al. 1988;

(Vestermark 1974

$$OR = \frac{1}{(1 - \frac{1}{OR})}$$

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Devos et al.).

1999; Hashemipour et al. 2004; Jones et al.

1991; LaFranchi 1999; Law 1998; Waller

/ (et al. 2000

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Hashemipour et al. 2004; Henry et al.)
(2002; Jones et al. 1991

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Al-Jurayyan et al. 1997; Kurinczuk et al.)
2002; Law 1998; Medda et al. 2005; Olivieri
et al. 2002; Roberts et al. 1997; Roberts et al.
(1997

Kurinczuk et al.) /
(2002; Medda et al. 2005

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(Law 1998)

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(al. 2007

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(Kurinczuk et al. 2002)

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Al-Jurayyan et al. 1997;)
Bamforth et al. 1986; Chao et al. 1997;
(Oakley et al. 1998

Medda et al.)
(2005; Olivieri et al. 2002

(Kurinczuk et al. 2002)

TSH

Chan-Cua et al. 2003;McElduff et al.)

TSH (2005

.(Lin et al 1994)

(Medda et al. 2005)

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Kurinczuk et al.)

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(2002

(Law 1998)

Gruters etal. 2003; Biebermann)

(2003

.(Waller et al. 2000)

.(Kurinczuk et al. 2002)

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Kurinczuk et al. 2002; Medda et al.)

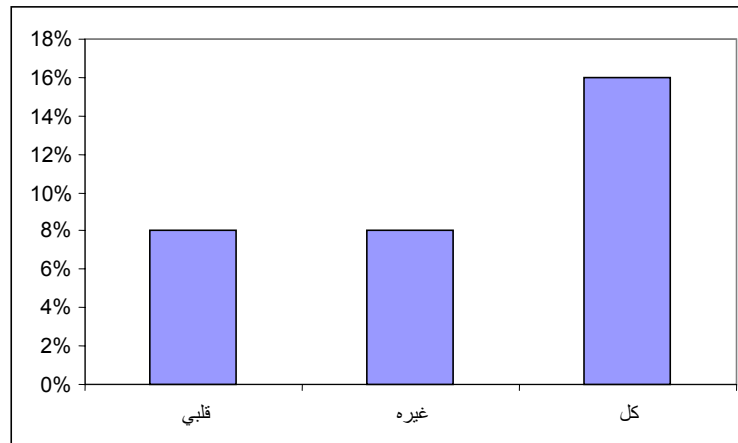
(2005

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	(OR) Trend OR **	*



References

- Al-Jurayyan, N.A., Al-Herbish, A.S., El-Desouki, M.I., Al-Nuaim, A.A., bo-Bakr, A.M. and Al-Husain, M.A., 1997, Congenital anomalies in infants with congenital hypothyroidism: is it a coincidental or an associated finding?, *Hum. Hered.*, **47**(1), pp. 33-37.
- Bamforth, J.S., Hughes, I., Lazarus, J. and John, R., 1986. Congenital anomalies associated with hypothyroidism, *Arch.Dis.Child.*, **61**(6), pp. 608-609.
- Beardsall, K. and Ogilvy Stuart, A.L., 2004. Congenital hypothyroidism, *Current Paediatrics*, **14**, pp. 422-429.
- Brown, R.S. and Demmer, L.A., 1987. The etiology of thyroid dysgenesis-still an enigma after all these years, *J.Clin.Endocrinol.Metab* 2002. Sep. pp. 4069-4071.
- Castanet, M., Lyonnet, S., Bonaiti-Pellie, C., Polak, M., Czernichow, P. and Leger, J., 2000. Familial forms of thyroid dysgenesis among infants with congenital hypothyroidism, *N. Engl. J. Med.* Aug. **10**, pp. 441-442.
- Chan-Cua, S., Ng, M., Dayao, I., Cuayo-Juico, C., King, F. and Tan, K.K., 2003. Urinary iodide levels in term newborns and their mothers--a pilot study, *Southeast Asian J.Trop.Med.Public Health*, vol. 34 Suppl 3, pp. 158-161.
- Chao, T., Wang, J.R. and Hwang, B., 1997, Congenital hypothyroidism and concomitant anomalies, *J. Pediatr. Endocrinol. Metab.*, **10**(2), pp. 217-221.
- Delavari, A., Yar Ahmadi, Sh. and Mahdavi, A., 2007. *The physician and congenital hypothyroidism*.
- Devos, H., Rodd, C., Gagne, N., Laframboise, R. and Van, V.G., 1984. A search for the possible molecular mechanisms of thyroid dysgenesis: sex ratios and associated malformations, *J. Clin. Endocrinol. Metab* 1999. Jul. pp. 2502-2506.
- Dussault, J.H., Mitchell, M.L. and LaFranchi, S., 2007. Regional screening for congenital hypothyroidism: Result of screening 1million North American Infants. Neonatal thyroid screening.
- Fernhoff, P.M., 1998. Congenital hypothyroidism and associated birth defects: implications for investigators and clinicians, *J.Pediatr.* **132**, pp. 573-574.
- Fisher, D.A., 2007. *Diorders of the Thyroid in the newborn and infant*, second edn.

- Gillam, M.P. and Kopp, P., 2001. Genetic regulation of thyroid development, *Curr.Opin.Pediatr.*, **13**(4), pp. 358-363.
- Gruters, A., Biebermann, H. and Krude, H., 2003. Neonatal thyroid disorders, *Horm. Res.*, **59**(1), pp. 24-29.
- Hashem Pour, M., 2004. Prevalence of congenial hypothyroidism in Isfahan, Iran: Results of a survey on 20000 Neonates, *Horm Res*, **62**, pp. 79-83.
- Hashemipour, M., Amini, M., Iranpour, R., Sadri, G. H., Javaheri, N., Haghighi, S., Hovsepian, S., Javadi, A. A., Nematbakhsh, M. and Sattari, G., 2004. Prevalence of congenital hypothyroidism in Isfahan, Iran: results of a survey on 20,000 neonates, *Horm.Res.*, **62**(2), pp. 79-83.
- Henry, G., Sobki, S.H. and Othman, J.M., 2002. Screening for congenital hypothyroidism, *Saudi Med.J.*, **23**(5), pp. 529-535.
- Jones, J.H., Mackenzie, J., Croft, G.A., Beaton, S., Young, D. and Donaldson, M. D., 1991. Improvement in screening performance and diagnosis of congenital hypothyroidism in Scotland 1979-2003, *Arch. Dis. Child.* pp. 680-685.
- Karamizadeh, Z. and Amirhakimi, G., 2007. Incidence of Congenital Hypothyroidism in Fars province. *Irish Journal of Medical Science*.
- kopp, P., 2002. Perspective: Genetic Defects in the Etiology of Congenital Hypothyroidism, *Endocrinology*, 143.
- Kurinczuk, J.J., Bower, C., Lewis, B. and Byrne, G., 2002. Congenital hypothyroidism in Western Australia 1981-1998, *J. Paediatr. Child Health*, **38**(2), pp. 187-191.
- LaFranchi, S., 1999. Congenital hypothyroidism: etiologies, diagnosis, and management, *Thyroid*, **9**(7), pp. 735-740.
- Law, W.Y., 1998. Congenital Hypothyroidism in Wales (1982-1993): demographic features, clinical presentation and effects on early neurodevelopment, *Cinical Endocrinology*, **48**, pp. 201-207.
- McElduff, A., McElduff, P., Wiley, V., & Wilcken, B. 2005, "Neonatal thyrotropin as measured in a congenital hypothyroidism screening program: influence of the mode of delivery", *J.Clin.Endocrinol.Metab*, vol. 90, no. 12, pp. 6361-6363
- Medda, E., Olivieri, A., Stazi, M.A., Grandolfo, M.E., Fazzini, C., Baserga, M., Burroni, M., Cacciari, E., Calaciura, F., Cassio, A., Chiovato, L., Costa, P., Leonardi, D., Martucci, M., Moschini, L., Pagliardini, S., Parlato, G., Pignero, A., Pinchera, A., Sala, D., Sava, L., Stoppioni, V., Tancredi, F., Valentini, F., Vigneri, R. and Sorcini, M., 2005. Risk factors for congenital hypothyroidism: results of a population case-control study (1997-2003), *European Journal of Endocrinology*, **153**(6), pp. 765-773.
- Miyai, K., Inaoka, K. and Miyagi, T., 2005. Further studies on episodic occurrence of congenital dysgenetic hypothyroidism in Osaka, Japan, *Endocr.J.*, **52**(5), pp. 599-603.
- Oakley, G.A., Muir, T., Ray, M., Girdwood, R.W., Kennedy, R. and Donaldson, M.D., 1998. Increased incidence of congenital malformations in children with transient thyroid-stimulating hormone elevation on neonatal screening, *J. Pediatr.*, **132**(4), pp. 726-730.
- Olivieri, A., Stazi, M.A., Mastroiacovo, P., Fazzini, C., Medda, E., Spagnolo, A., De, A.S., Grandolfo, M. E., Taruscio, D., Cordeddu, V. and Sorcini, M., 2002. A population-based study on the frequency of additional congenital malformations in infants with congenital hypothyroidism: data from the Italian Registry for Congenital Hypothyroidism (1991-1998), *J. Clin. Endocrinol. Metab*, **87**(2), pp. 557-562.

- Ordookhani, A., Hedayati, M., Mirmiran, P., Hajipour, R., Azizi, F. 2000. High prevalence of neonatal hypothyroidism in Tehran, *Iranian Journal of Endocrinology and Metabolism*. **2**(4), pp. 263-277 [In Persian]
- Ordookhani, A., Mirmiran, P. and Azizi, F., 2003. Parental consanguinity: a probable cause for the high incidence of permanent neonatal hypothyroidism, *Iranian Journal of Endocrinology and Metabolism*. **5**(4), pp. 293-298 [In Persian]
- Perna, M.G., Civitareale, D., De, F., Sacco, M., Cisternino, C. and Tassi, V., 2007. Absence of mutations in the gene encoding thyroid transcription factor-1 (TTF-1) in patients with thyroid dysgenesis, *Thyroid* 1997. Jun. pp: 377-381.
- Roberts, H.E., Moore, C.A., Fernhoff, P.M., Brown, A.L. and Khoury, M.J., 1997. Population study of congenital hypothyroidism and associated birth defects, Atlanta, 1979-1992, *Am. J. Med. Genet.*, **71**(1), pp. 29-32.
- Van, V.G., Larroque, B., Bubuteishvili, L., Supernant, K. and Leger, J., 1988. Sex-specific impact of congenital hypothyroidism due to thyroid dysgenesis on skeletal maturation in term newborns, *J. Clin. Endocrinol. Metab* 2003. May. pp. 2009-2013.
- Vestermark, S., 1974. Congenital hypothyroidism. Athyreosis, agenesis or dysgenesis of the thyroid gland, *Ugeskr.Laeger* 1974. Mar.11 p. 589.
- Waller, D.K., Anderson, J.L., Lorey, F. and Cunningham, G.C., 2000. Risk factors for congenital hypothyroidism: An investigation of infant's birth weight, ethnicity, and gender in California, 1990-1998, *Teratology*, **62**(1), pp. 36-41.
- Wilcken, B., 2005. Neonatal thyrotropin as measured in a congenital hypothyroidism screening program: influence of the mode of delivery, *J.Clin.Endocrinol.Metab*, **90**(12), pp. 6361-6363.