13. Stoop, R. Neuromodulation by oxytocin and vasopressin in the central nervous system as a basis for their rapid behavioral effects
27. Field, T. Touch for socioemotional and physical well-being: A review. Developmental Review 30 367–383
30. Leon, M. Touch and smell In: Field touch in infancy
31. Gumert, M. D. & Moon-Ho R. HoThe trade balance of grooming and its coordination of reciprocation and tolerance in Indonesian long-tailed macaques (Macaca fascicularis) Michael D. Æ
42.
43.

45.
46.
47.

49. 

50. 


52. Liley, A. W. The foetus as a personality. Aust NZ J Psychiatry 6 (1972)


58. 


74. ...

75. ...


78. Agren, G., Lundeberg, T., Uvnäs-Moberg, K. & Sato, A. The oxytocin antagonist 1-deamino-2-D-Tyr-(Oet)-4-Thr-8-Orn-oxytocin reverses the increase in the withdrawal response latency to thermal, but not mechanical nociceptive stimuli following oxytocin administration or massage-like stroking in rats. Neurosci Lett 187, 49-52 (1995)


81. IsHak Oxytocin role in enhancing well-being: A literature review Waguih William IsHak a,b,c, *, Maria Kahloon d , Hala Fakhry e Journal of Affective Disorders 130 (2011) 1–9


85. ...

86. Sleep/deprivation

87. Light, K., Grewen, K. M. & Amico, J. More frequent partner hugs and higher oxytocin levels are linked to lower blood pressure and heart rate in premenopausal women. Biol Psychol 69, 5-21 (2005)

88. Kangaroo field


91. rat handling


95. Schore


97. Touch and Smell in Field


101. Stack & Muir 1992 still face


111. LJ Luecken Childhood attachment and loss experiences affect adult cardiovascular and cortisol function - Psychosomatic Medicine, 1998


119. Daskalakis: mild stress enhances development

120. thalamus associativ touch auswählen


125. thalamus associativ touch auswählen

126. thalamus associativ touch auswählen

127. thalamus associativ touch auswählen
Emotions promote social interaction by synchronizing brain activity across individuals. Nummenmaa L1,

Different topological organization of human brain functional networks with eyes open versus eyes closed.
Xu P,

Carey LM1, Abbott DF, Harvey MR, Puce A, Seitz RJ, Donnan GA.

BACKGROUND:
The neural basis underlying somatosensory impairment and recovery poststroke is virtually unexplored.

OBJECTIVE:
To investigate the relationship between touch discrimination impairment and task-related brain activation in stroke survivors with somatosensory impairment following subcortical or cortical lesions.

METHODS:
A total of 19 stroke survivors with touch impairment were investigated using fMRI and a touch discrimination paradigm 1-month poststroke; 11 had subcortical and 8 cortical sensory lesions; 12 age-matched healthy controls were also studied. Mean task-related contrast images were regressed with sensory impairment using random effects analysis for each subgroup and the total group.

RESULTS:
There was no significant difference in touch impairment between stroke subgroups. Touch discrimination of the affected hand correlated negatively with task-related activation in the ipsilesional primary somatosensory cortex (SI; adjacent to the SI hand area activated in healthy controls); ipsilesional secondary somatosensory cortex (SII); contralesional thalamus; and attention-related frontal and occipital regions in the subcortical group. In contrast, the cortical group did not show significant correlated activity. Yet there was no significant between-group difference in a priori somatosensory regions: only in the superior medial frontal gyrus. A negative correlation was observed in the contralesional thalamus for the total group, irrespective of lesion type.

CONCLUSION:
The findings provide novel evidence of neural correlates of poststroke touch impairment involving a distributed network of ipsilesional SI and SII, the contralesional thalamus, and frontal attention regions, particularly following subcortical lesions. Further systematic investigation
of a modulatory role for ipsilesional SI, the thalamus, and frontal attention regions in sensory processing and recovery is warranted, particularly given implications for rehabilitation.

**Sub-threshold cross-modal sensory interaction in the thalamus; lemniscal auditory response in the medial geniculate nucleus is modulated by somatosensory stimulation.**

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