

Scientific Round-up

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Mobile Phone Use and Risk of Glioma

You might be talking to your dear ones through your mobile phone while reading this round up. We have been hearing that brain tumors have been associated with the use of mobile phone. But these rumors are not true say a group of scientists from United Kingdom who have investigated the risk of glioma in adults in relation to mobile phone use. They have found that there is no significant increased risk of glioma for people who use mobile phones.⁴

They carried out a population based case-control study of 966 patients with glioma in the United Kingdom and found that use of a mobile phone, either in the short or medium term, is not associated with an increased risk of glioma. Moreover, most published epidemiological studies on mobile phone use and gliomas have not generally reported any increased risk either overall or with long term use.^{3, 5, 6, 7}

Erotic Images and Brain

You might be wondering how our brain perceives the erotic images. The researchers from Washington University have found that while watching erotic images brains produced electrical responses that were stronger than those elicited by other material that was viewed.²

Brainwave activity of 264 women as they viewed a series of 55 color slides that contained various scenes from water skiers to snarling dogs to partially-clad couples in sensual poses were measured. When study volunteers viewed erotic pictures, their brains produced electrical responses that were stronger than those elicited by other material that was viewed, no matter how pleasant or disturbing the other material may have been. This difference in brainwave response emerged very quickly, suggesting that different neural circuits may be involved in the processing of erotic images.

The researchers learned that regardless of a picture's content, the brain acts very quickly to classify the visual image. The event-related potentials (ERPs) begin firing in the brain's cortex long before a person is conscious of whether they are seeing a picture that is pleasant, unpleasant or neutral. But when the picture is erotic, ERPs begin firing within 160 milliseconds, about 20 percent faster than occurred with any of the other pictures. Soon after, the ERPs begin to diverge, with processing taking place in different brain structures for erotic pictures than those that process the other images.

It seems, perhaps for evolutionary reasons, our brains are programmed to preferentially respond to erotic material.

Oral Contraceptives Increase the Risk of Headache

A large, cross-sectional population-based study was conducted to examine the prevalence of headache and migraine among women using oral contraceptives (OCs) in Norway and the study was published in the February 14 issue of *Neurology*¹. The study reported that headache, especially migraine, was more likely among premenopausal women using oral contraceptives containing estrogen.

The study (The Head-HUNT Study) which was conducted for the period of two years from 1995-1997 involved 27700 women and found that there was a significant association between headache and reported use of estrogen-containing OCs in premenopausal women, both for migraine and for non-migrainous headache.

Is your headache due to OCs?

Surgery for Epilepsy and the Quality of Life

Epilepsy surgery improves the quality of life of children rendered seizure free reports the study published in the journal *Neurology*⁸. The researchers from Australia studied to determine if epilepsy surgery is effective in improving the quality of life (QOL) of children with intractable seizures using the Quality of Life in Childhood Epilepsy Questionnaire (QOLCE).

It was a prospective study of the families of 35 children with intractable epilepsy who underwent epilepsy surgery. Children were split into two groups according to surgery outcome: seizure free versus persistent seizures and the results showed greater improvement in QOL for children rendered seizure free versus children with persistent seizures. This was significant for the overall QOLCE QOL score and subscales assessing cognitive, social, emotional, behavioral, and physical domains of life.

Could surgery prove to be a better choice for the children with epilepsy in improving the quality of life? We might need to wait for more controlled trials before we opt for this modality of treatment.

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