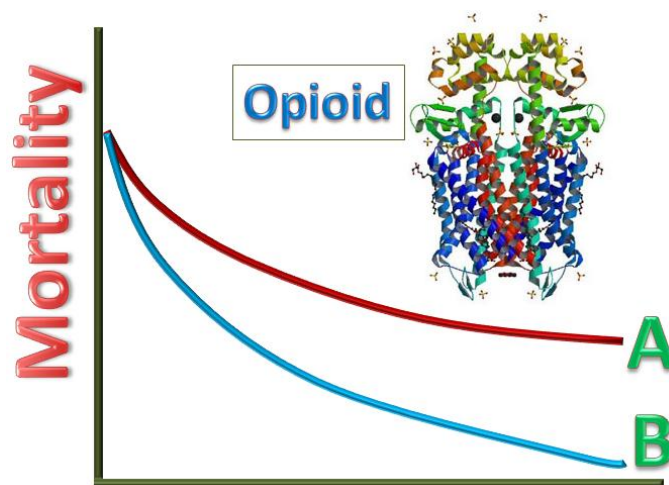


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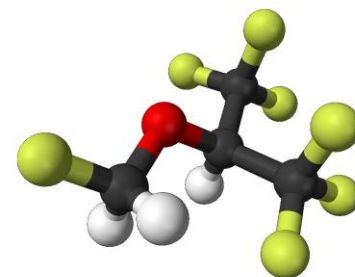
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COVER

Are there convincing evidence demonstrating the causality between postoperative pain and cancerous mortality? It is hard to draw a conclusion from the currently available data. Pain itself is an immune suppressor and functions as a tumor-promoting mediator, but it is strongly associated with the pain intensity. The mild-to-moderate pain is a favorable factor to the recovery for patients from surgeries. See page 55.
Image: BASE illustrating group

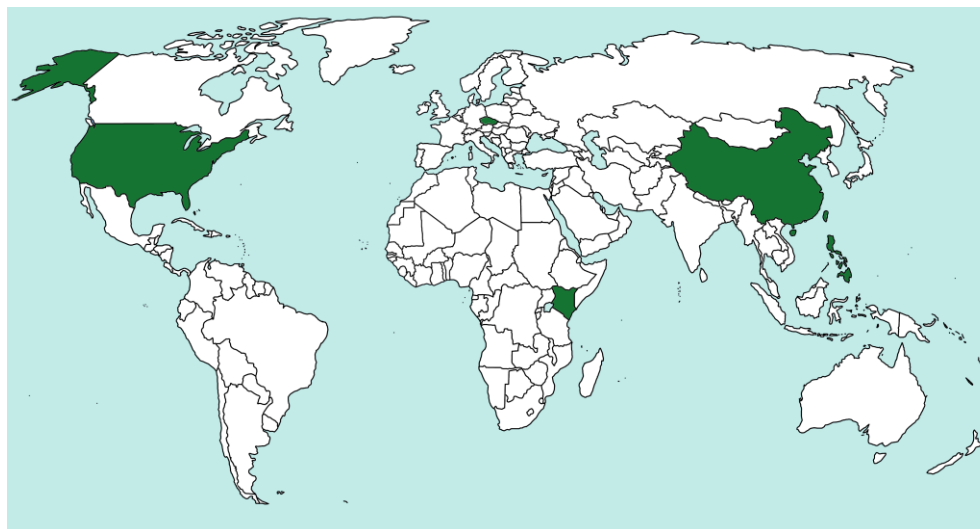
ISSN: 2329-5856

Pittsburgh, USA

No Yelling at Your Kids

What is education? How to educate? We are seeking the answer. A new study revealed that yelling at your kids and insulting them in response to bad behavior can have as much of a negative effect on them as hitting them would. The authors from the University of Pittsburgh said that shouting cannot reduce or correct the problem behavior. On the contrary, it would make it worse. The yelling makes teens feel they are not capable, that they are worthless and are useless, which would cause more lashing out behavior that parents yell about. The report noted that the degree of warmth of the parent-child relationship outside of any altercations cannot alter the negative effects of the harsh verbal discipline. Teens and younger children do not sense authority from people who is yelling at them. They're terrified and they're going to be hurt, and in fact they are being traumatized – that's why yelling is also called verbal abuse. Remember, yelling is a sign of dysfunction and it indicates helplessness and a loss of control. Bear in mind, too, though that no one is perfect, and if you do get frustrated and accidentally yell at your kids, an immediate apology acknowledging the behavior will put you back in their esteem, solidifying your trustworthiness and good judgment in their eyes. ■

Prague, CZECH REPUBLIC



Monitoring Pollution with Bees

How to monitor the pollution? We only depend on the reports for the environmental bureau. Are there special means that can tell us the real changes of pollution in everyday life? Yes, there are. People in Prague, Czech Republic use honey produced by bees at the Vaclav Havel Airport to check for its quality and presence of pollutants in the environment. Beekeeper Roman Kuttelwascher checks a honeycomb from a beehive at Vaclav Havel Airport in Prague August 27, 2013. Kuttelwascher is an amateur apiarist and works at the airport as an airport technician. Honey produced by the bees is checked for its quality and presence of pollutants to help the Vaclav Havel Airport Prague to collect pollution data about the environment. ■

Tempe, USA

Surprising Ingredient for Life from Meteorite

How big is the space? Are there true lives like us in this space? Whether alien visited us or not? Who knows?

Recently, scientists have discovered unexpected ingredients for life, organic molecules never seen before in meteorites, inside a chunk of space rock that fell to Earth over California last year. Meteors that streak across Earth's sky mostly are fragments of the asteroids that lie between Mars and Jupiter. Meteorites can be rich in organic compounds, including some found among life on Earth. Dr. Sandra Pizzarello, a biochemist from Arizona State University in Tempe, the lead researcher said that the composition had always been seen as an indication that the precursors to the evolution that led to the origins of life could have come from the extra-terrestrial material of meteorites since the origins of life are utterly unknown, the idea had its merits. The organic chemicals in meteorites can get extracted with the aid of solvents. Speculation regarding the origin of life is based on the notion that it arose from a "prebiotic" soup of organic molecules, perhaps delivered in part by meteorites. The researchers tried dissolving the fragments in conditions mimicking hydrothermal vents on Earth, the

environment often seen in the early Earth that life might have arisen within. Upon such treatment, the rocks released organic molecules not previously detected in similar meteorites. The findings that suggest there are far more organic materials available via meteorite for planetary environments than scientists assumed. May be only a joke from the God, you human “scientists” can find the clue.■

Zamboanga City, PHILIPPINES

Fighting Erupts in Southern Philippines

What a political situation of the world? What is the future of the earth? No one knows. Houses were set ablaze on 10 September 2013 as fighting erupted between Philippine security forces and Muslim rebels occupying five districts of the southern Philippine city of Zamboanga. Fire fighters were prevented from getting to the houses by sniper fire. On 09 September 2013, hundreds of heavily armed Muslim gunmen landed in coastal districts of Zamboanga, took 30 hostages and had planned to march to the city hall to raise their flag and declare an independent state. But security forces stopped them from reaching the city center and a naval blockade prevented hundreds of gunmen from neighboring Basilan and Jolo from reinforcing their comrades, setting off a sea battle that killed seven rebels, a navy spokesman said. Schools, shops and offices remained closed as the standoff entered the second day. Ferry and air services

were also suspended. All these derived from the imbalance development.■

Beijing, CHINA

China Warns Japan on Diaoyu Island



China said it would not tolerate provocation after Japan’s top government spokesman said on Tuesday Japan might station government workers on disputed islands in the East China Sea to defend its sovereignty. A year ago on Wednesday, the Japanese government bought three of the isles from a private owner, inflaming anger in China where there were big anti-Japan protests over the purchase. China, the fourth biggest country in the world, has huge body of evidence convincing the sovereignty of Diaoyu Island since China’s ancient history. Japan reaches his hand on the disputed island to enlarge his boundary. The Chinese government has showed an unshakeable resolve and determination to protect the country’s territorial sovereignty and said he will not tolerate any provocative acts of escalation over China’s sovereignty. Let the history tells us the truth. Who can believe in a country not dare to face his notorious invading history to his neighbor

countries? Let time speak, we believe it will. No excuse there.■

Nairobi, KENYA

Kenyan Water Discovery Brings Hope to Parched North

The Kenyan government and UNESCO on 11 September 2013 announced the discovery of a potentially vast supply of underground water in the impoverished, drought-stricken extreme north of the country. The find, made using advanced satellite exploration technology and backed up by UNESCO drilling, was hailed as a scientific breakthrough that could radically change the lives of the half-a-million people living in one of the world's most arid regions. Two aquifers or underground layers of permeable rock or silt soaked in water were found in the Turkana region, the scene of a devastating drought two years ago that aid workers said pushed malnutrition rates up to 37 percent. The region, near the northern border with Uganda, South Sudan and Ethiopia, is the poorest in the country, and its people, 70% of whom are semi-nomadic working the hostile and desert-like environment, are among the most vulnerable on the continent. Of Kenya's 41 million strong populations, 17 million lack access to safe water, and 28 million do not have adequate sanitation. The UN organization said water quality also needed to be assessed, and that it was seeking to confirm the presence of a further three aquifers in the region.■

MEDICINE**Inducing Labor Does Not Increase Cesarean-Section Rate**

Can labor induction increase the risk of Cesarean Section (C-Section)? Pregnant women who are near their due date or have just passed it can have labor induced with drugs or other medical procedures, or they can simply wait for labor to start on its own. Traditional idea considers that labor induction can risk the increase in C-Section. Now, a new study suggests that women who elect to induce labor are less likely to wind up having a C-section compared with women who give labor a longer chance to begin naturally. This is an amazing finding. In the study, among women who had previously had a baby, the odds of having a C-section for their current pregnancy were cut by about half in those who underwent elective induction. About 3% of these women who were induced wound up having a C-section, while about 7% of those who waited for labor to start on its own had the surgery, said study researcher Blair G. Darney from Oregon Health and Science University. The new study was different in that the researchers compared women who, at a given time, either waited or were induced. Over the last 20 years, there has been an increase in labor inductions in the United States. But it remains unclear how induction in women whose pregnancies have reached term may affect the mother's or baby's health. The American College of Obstetricians and Gynecologists has recommended reducing inductions done before 39 weeks of pregnancy without medical reason, and studies have shown such reductions decrease admissions to the neonatal intensive care unit (NICU). While one of the key concerns surrounding inductions done without a medical reason is that they might increase the rate of C-sections, little is known about the risk, the researchers wrote in their study. ■

Obstet Gynecol 2013; in press

NEUROTOXICOLOGY**No Anesthesia in the Early Life**

Who wants to be anesthetized? For the teens or youth, it is dangerous for their development. New study revealed that early life anesthesia is a critical factor risking them in a defect cognition and learning when their reach older. The study led by Dr. Wang from Nanjing Medical University, China used sevoflurane, a general anesthetic commonly used in the pediatric setting because it is sweet-smelling, nonflammable, fast acting and has a very short recovery time. Although recent clinical data suggest that early anesthesia exposure is associated with subsequent learning and memory problems, it is difficult to determine the exact scope of developmental neurotoxicity associated with exposure to specific anesthetics such as sevoflurane. This is largely due to inconsistencies in the literature. Thus, in the present studies we evaluated the effect of early life exposure to sevoflurane (1%, 2%, 3% or 4%) on adulthood memory impairment in Sprague-Dawley rats. Animals were exposed to different regimens of sevoflurane anesthesia on postnatal days (PNDs) 3, 7, or 14 or at 7 weeks (P7W) of age and spatial memory performance was assessed in adulthood using the Morris Water Maze (MWM). Rats exposed to sevoflurane exhibited significant memory impairment which was concentration and exposure duration dependent. Disruption of MWM performance was more severe in animals exposed on both PNDs 3 and 7 than in animals exposed on both PNDs 3 and 14. The younger the animal's age at the time of exposure, the more significant the effect on later MWM performance. Compared to the neonates, animals exposed at P7W were relatively insensitive to sevoflurane: memory was impaired in this group only after repeated exposures to low doses or single exposures to high doses. Early life exposure to sevoflurane can result in spatial memory impairments in adulthood and the shorter the interval be-

tween exposures, the greater the deficit. Take care of your teens and children, no early life anesthesia with the exception of the emergent life-threatening surgeries. ■

NeuroToxicology 2013; 39: 45

PSYCHOLOGY**Willpower Determine the Impact of Glucose on Self-Control**

The present research provides critical new findings about the role of glucose ingestion in self-control and cognitive performance. It argues against the popular view that self-control depends on a limited physiological resource (blood glucose) that is depleted by even brief acts of self-control and is restored by glucose consumption. Instead, the results highlight the critical role of beliefs about willpower in self-control performance. Past research found that the ingestion of glucose can enhance self-control. It has been widely assumed that basic physiological processes underlie this effect. The authors from two institutes, University of Zurich, Switzerland and Stanford University, USA, hypothesized that the effect of glucose also depends on people's theories about willpower. They tested their thought with three experiments, both measuring and manipulating theories about willpower, showed that, following a demanding task, only people who view willpower as limited and easily depleted exhibited improved self-control after sugar consumption. In contrast, people who view willpower as plentiful showed no benefits from glucose—they exhibited high levels of self-control performance with or without sugar boosts. Additionally, creating beliefs about glucose ingestion did not have the same effect as ingesting glucose for those with a limited resource theory. As suggested by the authors that the belief that willpower is limited sensitizes people to cues about their available resources including physiological cues, making them dependent on glucose boosts for high self-control performance. ■

PNAS 2013; 110: 14837

Tomb-Painting, 1350BC (circa)

From The British Museum, UK



Fragment of a polychrome tomb-painting representing Nebamun seated (probably associated with the goose census scene from the same tomb) with remains of five vertical registers of polychrome-painted hieroglyphs.

Length: 73 cm, Width: 54 cm, Height: 67.5 cm (painting only)



Is Postoperative Pain a Mediator of Cancerous Mortality?

Xiaofeng Shen, *1 Shiqin Xu, *1 Rong Shen, † Xirong Guo, † Fuzhou Wang *‡Δ

SUMMARY: Postoperative pain is considered as a risk factor for the mortality of cancerous patients. Are there convincing evidence demonstrating the causality between them? It is hard to draw a conclusion from the currently available data. Pain itself is an immune suppressor and functions as a tumor-promoting mediator, but it is strongly associated with the pain intensity. The mild-to-moderate pain is a favorable factor to the recovery for patients from surgeries. Everything possesses dual facets: *yin* and *yang* balance system. What we need to do is how to take advantage of the favorable from both sides rather than debate which is superior to the other. Yes, even overbalance there, the key necessary for it is to taking measures to keep them on balance.■

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Keywords: Postoperative pain - Cancer - Mortality - Balance - Outcome

WE READ the paper published in the *British Journal of Medicine* with great interest on the effect of perioperative epidural analgesia on long-term cancer-free survival (1). This multicenter follow-up study compared the cancer recurrence-associated mortality in patients undergone epidural postoperative analgesia with those without epidural analgesia, and found epidural analgesia early after the cancer surgeries will not increase the long-term mortality. This was an intriguing trial and added information for the understanding upon the safety of early epidural analgesia

after cancer excision, whereas imprecise data were reported.

The authors described the background information of the study through underlining the impact of analgesia with or without opioids on immune functions that may be associated with the tumor metastasis. From the study protocol appeared in the present and previously published reports (1-3), the patients were randomized into one of the two groups: group epidural, intraoperative general anesthesia plus intraoperative epidural anesthesia and postoperative epidural analgesia; group control, intraoperative general anesthesia plus postoperative intravenous opi-

oids based analgesia. Such a design would undoubtedly result in a big difference in the consumption of anesthetics and analgesics because of the role of combined epidural and general anesthesia in reducing intraoperative drugs usage compared with general anesthesia alone (4, 5), and these changed drugs might produce undetected role in affecting immune cells function (6). Therefore, as the data presented in the study did not include the intraoperative drugs consumption, which consequently makes us want to know whether or not a difference in drugs usage exists, and if yes, was there any positive or negative influence of this difference on

BASE BASE BASE BASE BASE

Table 1. Example of skewed pain data with same mean but different median.

	Group I (n = 8)	Group II (n = 8)	P value
Original values of pain	0, 0, 0, 0, 0, 0, 1, 10	1, 1, 1, 1, 1, 2, 2, 2	–
Mean (SD/SEM)	1.4 (3.5/1.2)	1.4 (0.5/0.2)	1.0 *
Median (IQR)	0.0 (0.0 – 0.5)	1.0 (1.0 – 2.0)	0.02 †

* Denotes tested with student's t test under the assumption that the data were normally distributed.

† Denotes tested with Mann-Whitney test for the data's skewed property.

SD: standard deviation; SEM: standard error of means; IQR: interquartile range.

the study outcome?

Second, pain, specifically the postoperative pain itself is an immune suppressor (7), and even a tumor-promoting mediator (8). Although the authors presented pain intensity measured with visual analogue scale (VAS), they did not performed in-depth analyses of the effect of pain changes on the cancer survival. The pain intensity in the present study was at the mild-to-moderate level, though, the study found a significant difference in pain at day 1 after surgeries (both at rest and with coughing) and at days 1 to 3 with coughing, thus it was still possible that the pain affected the function of immune cells which finally influences the recurrence of the cancer. So it would be better to do a subgroup analysis of the potential effect of postoperative pain on the long term cancerous survival.

Third, the authors reported their observations of pain with mean and standard deviation (SD). This may be an issue needs to be corrected. Theoretically and practically, pain scorings are skewed data that need to be converted to logarithmic values if presented with means and SDs (9, 10). If without such a conversion, the median and interquartile range (IQR) of the pain scorings would be far more precise in predicting the overall effect of analgesia. Given the difference of statistical methods used in analyzing normally and non-normally distributed data, it might be lead to different statistical results (Table 1). There-

fore, the pain intensity scores in this study should be corrected to median and corresponding IQR or converted to logarithmic values. ■

CONFLICT OF INTERESTS

None

ACKNOWLEDGEMENTS

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