



HORMONE REPLACEMENT THERAPY INCREASES RISK OF BREAST CANCER

Hormone replacement therapy (HRT) increases the risk of breast cancer, and there are also more deaths from breast cancer among women who've taken HRT, according to the latest research on the topic.

What do we know already?

In 2002, a large trial of combined hormone replacement therapy (HRT using the hormones oestrogen and progestogen) was stopped early after it was discovered that the women taking HRT had a higher risk of breast cancer. There are also other serious problems linked to HRT, such as blood clots, heart disease, and strokes.

Although the side effects of HRT can be serious, they're not common, and doctors still recommend HRT to some women, as long as it's taken at the lowest effective dose for the shortest possible time.

Some research has hinted that, although women taking HRT are more at risk of breast cancer, the cancers caused by HRT are less aggressive and less likely to be fatal. To test this theory, researchers have followed up women from the original trial that discovered the breast cancer risk, to see what happened to the women in the longer term.

What does the new study say?

HRT increased the risk of invasive breast cancer, and there were also more deaths from breast cancer among women taking combined HRT. Invasive breast cancer is cancer that

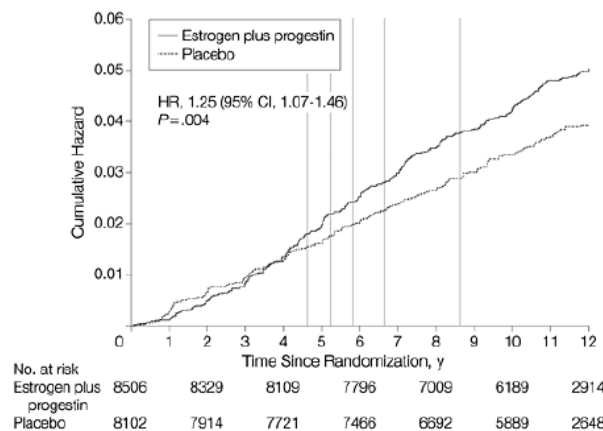
spreads from the breast to surrounding parts of the body. So, the theory that breast cancer caused by HRT is less aggressive would seem to be wrong. Among the women taking HRT, 385 out of 8,506 developed breast cancer (4.5 percent), and 25 died of it (0.29 percent). Among women taking an inactive placebo 293 of 8,102 developed breast cancer (3.6 percent), and 12 died of it (0.15 percent).

Women taking HRT were also more likely to be diagnosed with cancer that had already spread to nearby tissue (the

lymph nodes in the armpit) than women taking a placebo. The women in the study were between 50 and 79 years old, and had taken HRT for around five-and-a-half years, on average. They were followed up for an average of 11 years after starting treatment.

The article citation *JAMA*. 2010;304(15):1684-1692. doi:10.1001/jama.2010.1500

Incidence of Invasive Breast Cancer in the WHI Clinical Trial



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HEALTH ADVISORY: HUMAN PARAGONIMIASIS FOLLOWING INGESTION OF RAW CRAYFISH FROM RIVERS IN MISSOURI

The Missouri Department of Health and Senior Services (DHSS) is alerting medical providers about the occurrence of six confirmed and probable human paragonimiasis cases in Missouri. Three of these cases have been reported since October 2009. The most recent case was reported in early April 2010. Since human paragonimiasis is considered to be very rare in North America, six cases reported to Missouri DHSS in the past three years are alarming. All of these patients had ingested raw crayfish from rivers in Missouri.

Background:

Human paragonimiasis is a food-borne parasitic infection caused by the trematode *Paragonimus* (the lung fluke). Infection in humans mainly occurs by ingestion of raw or undercooked freshwater crabs or crayfishes. Paragonimiasis caused by *Paragonimus westermani* is common in East Asia where it is associated with ingestion of raw or marinated crabmeat. Rare cases of paragonimiasis have been reported in North America. North American cases are caused by *P. kellicotti*, a parasite that is common in crayfish in the central USA including Missouri.

Clinical presentation:

Paragonimiasis typically presents with fever, cough, and eosinophilia. Some patients have hemoptysis, and the clinical presentation can mimic tuberculosis. Pulmonary symptoms and fevers typically develop one or more months after ingestion of raw crabs or crayfish. The parasites sometimes migrate to ectopic locations such as subcutaneous tissue (presenting as migratory nodules) or even the central nervous system (with headache, seizures, or visual symptoms).

Patients with paragonimiasis often have abnormal chest exams with rales, rhonchi, or signs of pleural effusion. Eosinophilia is common (>5% eosinophils or absolute count >500). Most also have abnormal chest radiographic findings with focal infiltrates and/or pleural effusions. Bronchoalveolar lavage (BAL) and pleural fluid from patients with pulmonary paragonimiasis typically show increased eosinophils.

Diagnosis:

Clinical diagnosis requires awareness of the illness and a high index of suspicion. Patients with the triad of fever, cough, and eosinophilia should be asked about raw crayfish ingestion. In patients with consistent history and fever,

cough, eosinophilia, and/or hemoptysis, diagnosis of paragonimiasis should be considered. Chest X-rays in such patients may show focal infiltrates and/or pleural effusions. The parasite can migrate to the CNS, and suspected cases with headaches, seizures, or visual symptoms should have CNS imaging studies performed. Parasitological diagnosis by detection of parasite eggs in sputum or stool is specific but insensitive. Serology can be useful to confirm a clinical diagnosis of paragonimiasis. The Centers for Disease Control and Prevention (CDC) performs an immunoblot assay that is highly sensitive (96%) and specific (99%) for *P. westermani*, the species native to Asia. However, the sensitivity of this test in patients with *P. kellicotti* has not been established due to rarity of this illness in North America.

Treatment:

Paragonimiasis is treated with praziquantel (25 mg/kg orally three times daily for two days). Although all of the Missouri patients required hospitalization, they all had excellent clinical responses to praziquantel with improved symptoms within days and resolution of eosinophilia over a period of weeks to months.

DHSS urges persons who develop fever, cough, or hemoptysis after ingestion of raw crabs or crayfish to seek medical care. Medical Providers who know of other proven or suspect cases are encouraged to report these cases to the Independence Health Department at (816) 325-7204, or to DHSS at 866-628-9891 or by fax at 573 526-0235. Dr. Philip Lo at DHSS, Philip.Lo@dhss.mo.gov; (573) 526-1369) is available for consultation.

DHSS advises that crabs and crayfish should be thoroughly cooked prior to consumption to avoid the risk of paragonimiasis. DHSS has distributed posters to campgrounds and canoe rental businesses to warn the public about the danger of eating raw crayfish. Questions can be directed to the Independence Health Department at (816) 325-7204, or to DHSS' Bureau of Communicable Disease Control and Prevention at (573) 751-6113, or 866-628-9891.

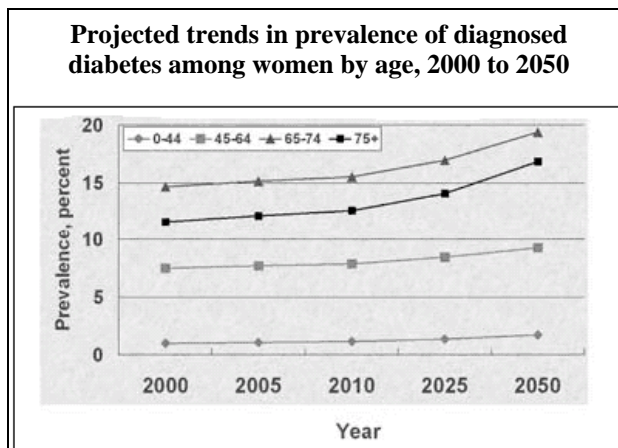
Additional information at:

1. <http://www.journals.uchicago.edu/doi/full/10.1086/605534>
2. <http://www.dpd.cdc.gov/dpdx/HTML/Paragonimiasis.htm>
3. <http://cmr.asm.org/cgi/content/abstract/22/3/415>



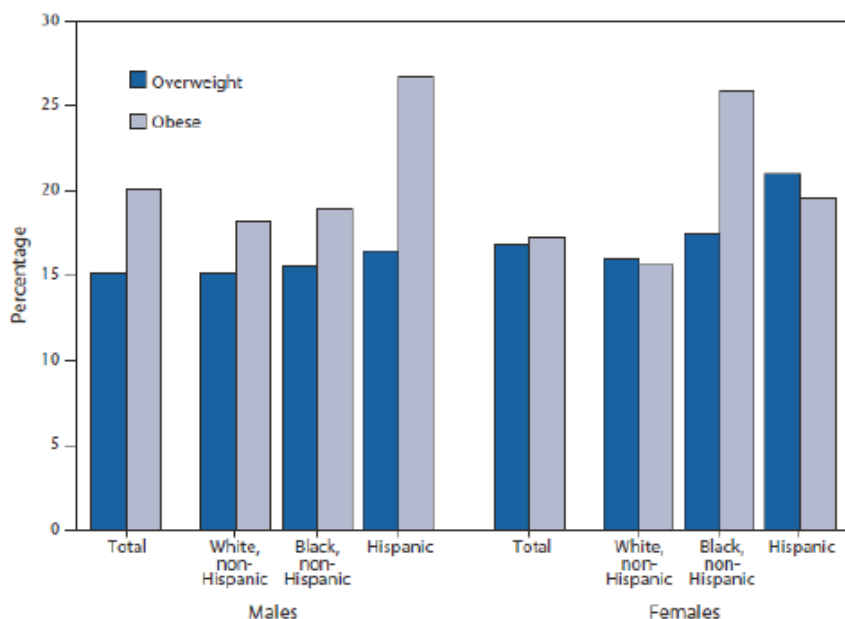
DIABETES IS A SERIOUS AND GROWING PUBLIC HEALTH PROBLEM

- More than 17 million Americans currently have diabetes; 5.9 million of them are undiagnosed.
- One million new cases of diabetes are diagnosed each year.
- By the year 2050, the number of people with diagnosed diabetes is projected to increase from 11 million to 29 million.
- Diabetes costs the United States about \$98 billion annually: \$44 billion for direct medical care and \$54 billion for indirect costs associated with disability, work loss, and premature mortality.
- People diagnosed with diabetes are at twice the risk of death as those without diabetes.
- Diabetes is the sixth leading cause of death and the primary cause of blindness, nontraumatic amputations of lower limbs, and kidney failure among adults.



*Information obtained from the CDC

PREVALENCE OF OVERWEIGHT* AND OBESITY† AMONG YOUTHS AGED 6--19 YEARS, BY RACE/ETHNICITY AND SEX --- NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY, UNITED STATES, 2007--2008



During 2007--2008, obesity was more prevalent among Hispanic males aged 6--19 years (26.7%) than non-Hispanic white (18.2%) and non-Hispanic black (18.9%) males. Obesity was more prevalent among non-Hispanic black females (25.9%) than non-Hispanic white females (15.6%). No significant differences in prevalence of overweight by race/ethnicity were observed among either males or females aged 6--19 years.

* Body mass index (BMI) \geq 85th and $<$ 95th sex- and age-specific percentile from the 2000 CDC growth charts.

† BMI \geq 95th sex- and age-specific percentile from the 2000 CDC growth charts.

Sources: Ogden CL, Carroll MD, Curtin LR, Lamb MM, Flegal KM. Prevalence of high body mass index in U.S. children and adolescents, 2007--2008. JAMA 2010;303:242--9.

National Health and Nutrition Examination Survey, 2007--2008. Available at <http://www.cdc.gov/nchs/nhanes.htm>.



September Communicable Disease Report

Disease/Condition		Jul-10	Aug-10	Sep-10	Sep-09 YTD 2010	cases inves- tigated current month	% change +/- from prior month	
Influenza-like Illness		0	153	712	2381	6324	0	365.4%
Hemorrhagic Dis-		0	0	0	0	0	0	0.0%
Gastrointestinal Ill-		7	198	1047	1431	10116	0	428.8%
Neurologic Illness		0	29	184	257	1327	0	534.5%
Rash Illness		52	40	78	113	663	0	95.0%
Fever Illness		0	99	578	1706	5279	0	483.8%
Respiratory Illness		166	204	822	2061	8786	0	302.9%
Chemical Exposure		0	0	0	0	0	0	0.0%
Animal bites		19	13	12	8	179	4	-7.7%
GI Illness	Salmonellosis	20	4	3	0	31	3	-25.0%
	Giardiasis	0	0	1	1	3	1	*
	Campylobacter	1	0	4	0	19	4	*
	Cryptosporidium	3	2	0	0	5	0	-100.0%
	Shigellosis	7	4	5	0	79	5	25.0%
	E. Coli	0	0	0	0	0	0	0.0%
Respiratory Illness	Influenza A	0	0	0	89	40	0	0.0%
	Influenza B	0	0	0	2	2	0	0.0%
	Influenza H1N1, lab confirmed	0	0	0	11	0	0	0.0%
	Influenza, untyped	0	0	0	1	0	0	0.0%
	Legionellosis	0	0	0	0	1	0	0.0%
	Tularemia, francisella	0	0	0	0	0	0	0.0%
Vaccine-Preventable	Chickenpox	0	1	3	8	13	0	200.0%
	Rubella	0	0	0	0	0	0	0.0%
	H. influenzae, invasive	0	0	1	0	3	1	*
	Measles	0	0	0	0	0	0	0.0%
	Mumps	0	0	0	0	0	0	0.0%
	Pertussis	0	1	3	4	5	3	200.0%
Hepatitis	A	0	0	0	0	0	0	0.0%
	B	3	5	3	5	21	3	-40.0%
	C	11	9	10	15	102	3	11.1%
Streptococcal Illness	Throat Cultures	0	0	0	0	0	0	0.0%
	Strept, Group A, invasive	0	1	0	0	3	0	-100.0%
	Strept pneumoniae, invasive	0	0	0	0	3	0	0.0%
CNS Illness	Encephalitis	0	0	0	0	0	0	0.0%
	Menigitis, viral	0	0	0	0	0	0	0.0%
	Menigitis, bacterial	0	1	0	0	1	0	-100.0%
	West Nile Virus	0	0	0	0	0	0	0.0%
	Lyme Disease	0	0	0	1	0	0	0.0%
	Erlichiosis	1	0	0	0	2	0	0.0%
	Rocky Mountain Spotted Fever	0	0	0	0	2	0	0.0%
Other	Listeria	0	0	0	0	0	0	0.0%
Other	Q Fever	0	0	0	0	0	0	0.0%
Total		65	41	45	145	514	27	9.8%