Medical Xpress

Aspirin use may decrease type of ovarian cancer, though risks of analgesic use must still be considered

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A new study conducted by European researchers in Denmark suggests that regular use of pain relief medications such as aspirin, can lead to a decreased risk of serious ovarian cancer in women. This is important news because despite significant progress in the field of gynaecological

cancer treatment during recent decades, the prognosis has remained poor, and many have stressed that preventive strategies are urgently needed.

Ovarian cancer is an aggressive carcinoma that affects the surface of the ovary; it is the deadliest gynaecological malignancy and the fifth leading cause of death by cancer for women in developed countries. It is estimated that the age-standardised rates for ovarian cancer incidence in Europe range from 12 per 100 000 women in southern Europe to 17 per 100 000 in northern Europe in 2008. The countries with the highest incidence rates were Latvia and Lithuania (around 19 per 100 000), and the lowest were Cyprus and Portugal (around 7 per 100 000). According to the Centers for Disease Control and Prevention (CDC), 20 000 women in the United States are diagnosed with ovarian cancer each year, with 90 % of cases occurring in women older than 40 years of age and the greatest number in those 60 years or older.

'Ovarian cancer has a high mortality. Understanding what factors are involved in the development of this disease and investigating preventative interventions for women are vitally important,' said lead author Dr Susanne Kjær with the Danish Cancer Society Research Center. 'Our study examined the role of analgesics in development of ovarian cancer.' Their study was published in Acta Obstetricia et Gynecologica Scandinavica, a journal of the Nordic Federation of Societies of Obstetrics and Gynecology and noted that that non-aspirin non-steroidal anti-inflammatory drugs (NSAIDs), paracetamol (acetaminophen) or other analgesics did not decrease ovarian cancer risk .

For their study the researchers used data from the malignant ovarian cancer (MALOVA) study, a population-based, case control study investigating this cancer in Danish women between 1995 and 1999. Previous studies report that Denmark has incidence and mortality rates

at 11 and 7 per 100 000 women, respectively. The team analysed data from 756 women with epithelial ovarian cancer, classified by type of glandular tumours (adenocarcinomas); 447 were serous, 138 were mucinous and 171 were other types. A random sample of 1 564 women between the ages of 35 and 79 were drawn from the general population as controls. With their sample in place the team then conducted personal interviews to determine analgesic drug use.

Their findings from these interviews indicate that women taking aspirin on a regular basis decreased their risk of serious ovarian cancer (odds ratio, OR=.60). However, the researchers did not find a decrease in ovarian cancer risk in women who regularly used non-aspirin NSAIDs, acetaminophen or other types of pain relievers.

Dr Kjær concludes, 'Our findings suggest a potential protective effect of analgesic use on ovarian cancer risk, but that benefit should be balanced against adverse effects of pain medication use, such as risk of bleeding and peptic ulcers.' The authors recommend that larger studies, which accurately assess dosage, frequency and duration of pain medications, are necessary to understand the impact of analgesic use on ovarian cancer.

Dr Magnus Westgren from Karolinska University Hospital in Stockholm, Sweden concurs with the study authors in his editorial and comments that strategies for preventing ovarian cancer are imperative. Dr Westgren discusses preventive procedures such as bilateral salingectomy (BSE) - a removal of the fallopian tubes - in women at risk for ovarian cancer.

'If we informed women about the possibility of performing BSE at repeat caesarean section for ovarian cancer prevention, it is likely that many women would opt for this procedure,' writes Dr Westgren. He suggests that gynaecology professionals discuss changing policies and

setting up randomised trials to further understand how BSE could reduce ovarian cancer risk.

More information: Ammundsen, H. B., et al., 'Use of analgesic drugs and risk of ovarian cancer: results from a Danish case-control study', Acta Obstetricia et Gynecologica Scandinavica, 2012, 91(9), 1094. doi:10.1111/j.1600-0412.2012.01472.x onlinelibrary.wiley.com/journal/10.1111/%28ISSN%291600-0412

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