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IN BRIEF

SCREENING

An extended optimal interval for gastric cancer

Screening for cancer has been advocated as a means to reduce the associated morbidity and mortality. However, the frequency of the screening visits should be optimized. In 2,485 patients with gastric adenocarcinoma in Korea, researchers assessed the interval between the last screening endoscopy and the endoscopy at which the gastric cancer was diagnosed. Unsurprisingly, there was a direct correlation between the time between the last screening and diagnosis scans and the stage of the cancer at diagnosis. However, endoscopy intervals of 3 years or less showed similar benefits, implying that for average-risk individuals, an interval of 3 years would be sufficient.

Original article Nam, J. H. *et al.* Association of the interval between endoscopies with gastric cancer stage at diagnosis in a region of high prevalence. *Cancer* doi:10.1002/cncr.27495

PALLIATIVE CARE

How to get high quality at the end of life

Part of the treatment of terminally ill cancer patients must be an optimization of end-of-life care to ensure that this stage is pain free and as emotionally and physically satisfying as possible. The Coping With Cancer study was set up to assess patient quality of life in the last week of life. This multicentre prospective, longitudinal study followed 396 patients with advanced-stage cancer at the end of their lives and assessed their quality of life (QoL) as well as other parameters thought to affect it. The avoidance of hospitalization or admission to an intensive care unit was associated with improved QoL. In addition, patients who are less worried, who pray or meditate and who are visited by a pastor in the hospital or clinic have a better QoL. In terms of treatment, patients who feel a therapeutic alliance with their physicians also report an improved QoL. However, in most cases it was not possible to identify the reasons for the variance in quality of life at this stage in the disease course.

Original article Zhang, B. *et al.* Factors important to patients' quality of life at the end of life. *Arch. Intern. Med.* doi:10.1001/archinternmed.2012.2364

RADIOTHERAPY

Improved acoustics enhance stimulation

The eradication of solid tumours using radiotherapy has long been one of the most powerful weapons in our treatment arsenal. Now, researchers investigating ultrasound-mediated microbubble vascular disruption have shown that this technique can enhance tumour response to radiation. The work was carried out in a human prostate cancer xenograft mouse model and showed that the combination of the microbubbles with the radiotherapy was 10-fold more effective at killing cancer cells than radiotherapy alone. This finding indicates that the two therapies work synergistically to eliminate cancer cells. Furthermore, the mechanism of action seems to be via the induction of ceramide-related endothelial cell apoptosis, leading to vascular disruption. The results of this study indicate that this dual technique might be a method to enhance tumour response using a low radiation dose, but a lot of work remains to be done.

Original article Czarnota, G. J. *et al.* Tumor radiation response enhancement by acoustical stimulation of the vasculature. *Proc. Natl Acad. Sci. USA* doi:10.1073/pnas.1200053109