Catching cancers when they are small still makes a difference to survival

Classic prognostic factors, such as tumour size, still matter, say experts

Catching cancers when they are small still makes a difference to survival, even in the current era of more effective therapies, suggests a study of breast cancer patients in The BMJ this week.

The research team, based in the Netherlands, say that traditional factors such as tumour size and number of positive lymph nodes “still have a significant and major influence on overall mortality independent of age and tumour biology.”

Breast cancer survival rates have increased significantly all over the world in the past decades, mainly due to earlier diagnosis and better treatment options. As such, it has been suggested that traditional prognostic factors, such as tumour size and number of positive lymph nodes, may no longer predict survival. And if these factors do affect survival, the size of this effect is unknown.

So researchers set out to estimate whether these factors still influence survival by comparing overall survival of 173,797 female breast cancer patients from two time frames (1999-2005 and 2006-12) using data from the Netherlands Cancer Registry.
Factors such as date and age at breast cancer diagnosis, tumour characteristics, and treatments were taken into account.

Compared with 1999-2005, tumours diagnosed in 2006-12 were smaller, more often lymph node negative, and more often low grade. Patients diagnosed in 2006-12 more often had breast conserving therapy and uptake of hormonal therapy, chemotherapy, and drug therapy was increased.

Compared with 1999-2005, relative survival rates and overall survival rates were higher for the 2006-12 cohort for all tumour and nodal stages, especially in women aged over 75 years. Overall relative survival of patients improved from 91% to 96% at five years’ follow up.

The results show that both tumour stage and lymph node status had a significant influence on overall survival in both cohorts.

The researchers stress that this is an observational study so no definitive conclusions can be drawn about cause and effect. Nevertheless, they say that tumour size and nodal status “still have a significant and major influence on overall mortality independent of age and tumour biology in the current era of more conservative surgery and newer systemic therapies.

Early stage at detection is vital; surgery is crucial, and more conservative surgery is more favourable,” they conclude.

In an accompanying editorial, Harold Burstein and Ines Vaz-Luis from Harvard Medical School say, despite the observational nature of the study, “there are powerful takeaway lessons from this extensive, population-based report.”

For example, they say enhanced treatments “are providing persistent, incremental improvement in outcomes” and certain groups of patients “are achieving astonishingly good outcomes.” Finally, these data suggest that early detection is still vital in improving outcomes for breast cancer, they add.
“Through public health screening and innovations in treatment, we are making steady progress against breast cancer,” they write. “A challenge ahead is to help other societies build models of screening and treatment that foster the access and success of the Dutch experience.”

[Ends]

Notes to Editors:
Research: Influence of tumour stage at breast cancer detection on survival in modern times: population based study in 173797 patients
http://www.bmj.com/cgi/doi/10.1136/bmj.h4901

Editorial: With better adjuvant therapy, does breast cancer stage still matter?
http://www.bmj.com/cgi/doi/10.1136/bmj.h5273

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Media Coverage

Tumor Stage Still Influences Survival in Breast Cancer - Medscape


This story was also covered by Doctors Lounge, HealthDay, Philly.com and Medical Xpress.