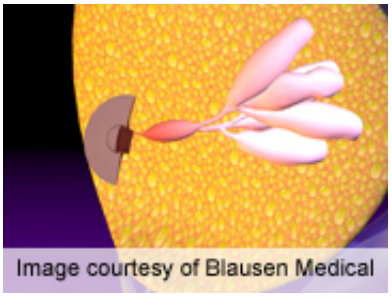
Breast CA nodal mets more common with certain mutations

July 25 2013



Lymph node metastases are more common in breast cancers with mutations in a cellular signaling pathway associated with growth, according to a study published online July 24 in *JAMA Surgery*.

(HealthDay)—Lymph node metastases are more common in breast cancers with mutations in a cellular signaling pathway associated with growth, according to a study published online July 24 in *JAMA Surgery*.

Cory A. Donovan, M.D., from the Oregon Health & Science University in Portland, and colleagues analyzed 30 invasive ductal breast cancers (stages IA through IIIB) for mutations in the *AKT1*, *HRAS*, and *PIK3CA* genes in breast cancer stem and progenitor cells and their association with various demographic and clinical factors.

The researchers found that 10 tumors had mutations. The presence of lymph node metastases was significantly more common when mutations

were present (90 versus 20 percent).

"Tumors in which breast cancer stem and progenitor cells have defects in PI3K/Akt signaling are significantly more likely to manifest nodal metastases," Donovan and colleagues conclude. "These oncogenic defects may be missed by gross molecular testing of the tumor and are markers of more aggressive breast cancer."

More information: Abstract
Full Text (subscription or payment may be required)