Ovarian cancer screening and the clinical surveillance of ovarian abnormalities

Women that are positive for an ovarian abnormality in a clinical setting can have either a malignancy or a benign tumor with probability favoring the benign alternative. Discovering a malignancy as early as possible will lead to extended survival. Surgery on benign abnormalities results in unnecessary procedures introducing cost burdens. Surveillance using serial ultrasonography can be used to discover if changes in the ovarian abnormality will occur that favor either a malignant or benign interpretation. Several ovarian cancer screening trials have had experiences with changes in sub-clinical ovarian abnormalities in normal women that can define growth, stability or resolution and the time frame over which changes occur. The present report examines information from screening trials, and relates it to ovarian cancer ontology, presenting arguments related to the benefits of surveillance. Intricacies of ovarian cancer screening are considered as ten considerations: 1. Deciding on the number to be screened, 2. Anticipating reductions due to death, 3. Deciding the duration and frequency of screening, 4. Deciding on the follow-up period, 5. Deciding on time to surgery, 6. Deciding on how screening cases are treated and by whom, 7. Deciding on how to treat data, 8. Deciding on how to assign disease specific death, 9. Deciding how to avoid participants with late stage disease, 10. Deciding whether the screening tool or a screening process is being tested. The considerations presented provide explanations of effects that have an important bearing on interpreting ovarian screening outcomes and the surveillance of ovarian abnormalities in clinical practice.

Biography

Edward J Pavlik is a Graduate of the University of Denver, and received his PhD from the University of Tennessee, Knoxville. He received a NCI Public Health Service Fellowship at the University of Illinois, Champaign-Urbana, Illinois and was a Visiting Assistant Professor, Department of Physiology and Biophysics at the University of Illinois, Champaign-Urbana. He is an active Lecturer and a Member of the Graduate College, serving on PhD dissertation committees with research focused on ovarian cancer screening and factors that affect screening accuracy and performance. He has authored over 100 peer reviewed publications.