12. What investigations are needed to optimally monitor for malignancies in SLE?

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Objective: To determine what investigations are needed to optimally monitor for malignancies in systemic lupus erythematosus, SLE, in order to inform upcoming CRA recommendations.

Introduction: The overall cancer incidence risk in SLE is approximately 15-20% more than in the general population; the risk profile includes a higher than expected risk of certain cancers, such as lymphoma and lung, and a lower than expected risk of breast and possibly other cancers. Concern also exists regarding higher rates than expected of cervical dysplasia (a procurer to cervical cancer) and cyclophosphamide-induced bladder cancer. Nevertheless, to date, the optimal malignancy screening measures in SLE remain undefined.

Study design and setting: We conducted a systematic search looking at three scientific sources, Embase, Medline and Cochrane, in an attempt to identify cancer screening recommendations for patient with SLE. We used a filter for observational studies and included articles published in 2000 and onward.

Results: The initial search strategy led to 986 records; after removal of duplicates, the titles were screened to remove those that were completely unrelated to SLE. This left us with 497 titles potentially related to cancer in SLE, of which 4 were excluded because they were case reports and 412 were excluded because they were unrelated to cancer in SLE. This left us with one recommendation paper (produced by EULAR) and 80 original research articles on cancer incidence in SLE. These articles were retrieved. Among these, there were no original research studies directly comparing cancer screening strategies in SLE. Of the 80 original research papers, 13 offered screening recommendations, all simply on the basis of their cancer incidence rate results. Of the 13, six studies simply promoted adherence to general population screening measures whereas seven suggested additional cancer screening. The suggestions for more rigorous screening included recommending human papilloma virus testing in addition to routine cervical screening, and/or that cervical screening should be done annually (as is done in the high-risk HIV populations) and/or suggested urine cancer screening in SLE patients with history of cyclophosphamide exposure. The EULAR recommendations suggested adherence to general population screening.

Conclusions: We found no original research studies directly comparing cancer screening strategies in SLE. Regardless, among the studies on cancer incidence in SLE, several offered screening recommendations. These mostly recommend adherence to general population screening measures, although some authors argue for rigorous cervical screening strategies, and/or suggested urine cancer screening in SLE patient with history of cyclophosphamide exposure.