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Title: Improving and addressing host immune defenses in ovarian cancer.

Ovarian cancer immunotherapy began in the 1970s with the finding that women with advanced ovarian cancer have low tuberculin reactivity. It was therefore first tried to increase this reactivity with the use of Bacillus Calmette-Guerin (BCG) by scarification or intradermally repeated administration (2-3 times), depending on the reaction obtained. It was subsequently tested whether the increased nonspecific reaction was effective against homogenates of tumor antigens obtained from the same patients. Finally, BCG was injected directly in the context of very advanced ovarian tumors, intraperitoneally or in subcutaneous metastases.Complete improvements or healings have been observed. The use of intratumoral BCG was extended years later mainly in papillary carcinoma of the bladder where it still represents the golden standard therapy and in cutaneous metastases of melanoma. This presentation discusses the two main mechanisms through which BCG immunotherapy might work (change in tumor antigen (TA) presentation and / or change in T1 lymphocyte response through a change in "native trained immunity."
The use of BCG could accompany that of check point inhibitors in the immunotherapy of human solid carcinomas.