Inhibitory mechanisms of Agaricus blazei Murill on the growth of prostate cancer in vitro and in vivo.
(Dette er en oppsummering, hele artikkelen er referert på PubMed).

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Source
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Abstract
Agaricus blazei Murill (A. blazei) has been conventionally used as a health food for the prevention of cancer. However, little is known about the direct effects and action mechanisms of A. blazei on human prostate cancer. In the present study, the effects of A. blazei on the growth of human prostate cancer were examined in vitro and in vivo. A. blazei, especially the broth fraction, inhibited cell proliferation in both androgen-dependent and androgen-independent prostate cancer cell lines. The broth of A. blazei induced lactate dehydrogenase leakage in three cancer cell lines, whereas the activities of caspase 3 and the DNA fragmentation were enhanced the most in androgen-independent PC3 cells. The protein expressions of apoptosis-related molecules were elevated by the broth of A. blazei in PC3 cells. Oral supplementation with the broth of A. blazei (with the higher ratio of beta-glucan) significantly suppressed tumor growth without inducing adverse effects in severe combined immunodeficient mice with PC3 tumor xenograft. Tumor xenografts from A. blazei-fed mice showed decreased proliferating cell nuclear antigen-positive cells and reduced tumor microvessel density. Based on these results, we found that the broth of A. blazei may directly inhibit the growth of prostate cancer cell via an apoptotic pathway and suppress prostate tumor growth via antiproliferative and antiangiogenic mechanisms. We therefore suggest that A. blazei might have potential therapeutic use in the prevention and treatment of human prostate cancer.

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