

4, 6-0-benzylidene-D-glucopyranose (BG) in the treatment of solid malignant tumours, an extended phase I study.

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4, 6-0-Benzylidene-D-glucopyranose (BG), a derivative of benzaldehyde (BA), whose anti-tumour action has often been reported, showed responses in 10 out of 24 patients (41.7%). These patients consisted of 11 cases of primary lung cancer, 4 of metastatic lung cancer, 5 of gastric cancer, and one each of cancer of the sigmoid colon, liver, pancreas and prostate. There were two complete responses (one each of ipsilateral lung metastasis from breast cancer and metastatic liver lesions due to gastric cancer). The mean total dose of BG was 392.6 g, given by intravenous infusion of 1.2 g BG in 100 ml saline twice daily. The treatment was discontinued when no response was observed after two months. Careful monitoring showed no toxic action of BG at these large doses. Complete necrotic liquefaction of tumour, without any damage to surrounding tissue, was seen in 2 of 3 cases in which histological examination was feasible. It is apparent that BG, like BA, is not a cytotoxic agent in the ordinary sense, but its mechanism of action is still unknown.

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