

ECHO

Spotlight on research

Give it a break!

Cancer is a disease that concerns all of us. Every year many new cases are diagnosed. In 10 years cancer will have killed as many people as the 1st world war! Each person feels the threat of this disease. And for those who have survived this test, it remains a painful and shattering experience. To live with or to fight against cancer, patients want to be partners in combating this disease. But this fight is not limited to science alone. It cannot be restricted only to those people who provide health care. It is a common struggle led by fellow human beings. And when science becomes powerless, what the patients need above all is attention and understanding. Listening to the words of those who are leaders in this fight or those who have won their own personal battles can suggest new ideas on looking after patients and the people close to them and especially on the repercussions of the disease and its social consequences. As Presidents of the Cancer & Solidarity Foundation, we salute the various initiatives taken in this field by the associations, DASS and all the health-care partners of the Canton of Geneva.

Thierry F. Ador et Olivier Ador

Living proof

Just 1 "uncontrollable" cell is enough to trigger off cancer! Cancer begins when there is at least one cell that ceases to be controlled by its neighbours and starts to proliferate. The reasons for this anarchic multiplication are many: prolonged inflammation, exposure to toxic substances, etc. But all lead to the same phenomenon: an alteration of the genes that control cellular division and specialization. That is how a mass of "immortal" cells – a tumour – gradually forms. To ensure its own growth, the tumour takes over for its own benefit the resources of the surrounding tissue. In some cases, the tumour even secretes the proteins that allow the migration of "daughter cells", which then propagate themselves forming secondary tumours, or metastases. Progressively, the tumours exhaust the resources of the organism, which can no longer perform its vital functions and in the end die.

Source: Science & Vie n° 1041

What's up, doc?

The fight against leukemia. To go further all the time and to allow an increasing number of children and young adults to benefit from bone marrow transplantation and to recover from this disease. Those are the objectives of the battle that Pr. Gluckman has been fighting for almost 30 years. "Our knowledge has increased, but the development of international cooperation is also very important for the progress achieved in treating leukemia", explains this bone marrow transplantation specialist. Fifteen years ago, the donors always came from the families of the patients involved for compatibility

reasons. Today, other people close to the patients can also be donors, or we can use the blood of people registered as donors with the international bone marrow data bank or umbilical cord blood for transfusions. More than 200,000 units of usable umbilical cord blood are available worldwide. This technique still needs to be improved, as it is limited by the number of stem cells available.

Source: Top Santé n° 168

Researchers solve
medical problems,
we solve their
money problems.

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On the front line

Within the framework of the qualitative Health Planning of the Canton of Geneva, **breast and prostate cancer and handicap conditions were chosen for priority action**. The aim of this public health programme, set under way in 2001-2002, was to contribute significantly to the improvement of the state of health of the Geneva population. For these priority objectives, working teams were set up to consider and draw up a list of concrete proposals. With regard to breast cancer, the priority was to improve screening, care and the quality of life of the women affected and of the people close to them. In Geneva, this participative approach has determined the real needs, of both the patients and the system. It is now a matter of translating them into concerted actions and thus improve the effectiveness and efficiency of the Canton's health-care system. Since 2004, priority action groups (GAPs) have been working on the development of actions related to two main themes: the socio-economic impact of a disease and information.

Planet research.

- In the treatment of colon cancer, the efficiency of screening and the removal of polyps have led to a significant decrease in the death rate. For those cases in which the disease is in a more advanced stage, a German company has developed a new drug called **Erbixut**. This molecule slows down the cell development process and has very few side effects, unlike more aggressive treatments such as chemotherapy.

Source: *swisscancer*, spring 2004

- The link between the consumption of saturated fats and the development of breast cancer seems to have been confirmed by a British study. For 4 years, 13,000 women recorded everything they ate at every meal. The results show that those whose diet is richer in fat have **twice the risk of developing the disease**.

Source: *The Lancet*, April 2004



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Vital statistics

Cancer: a true epidemic! Cancer is the second cause of death in France, behind cardiovascular diseases. And despite all the resources that have been dedicated for years to fighting this disease, cancer is still gaining ground. Between 1980 and 2000, the number of declared new cancer cases increased from 170,177 to 278,253.

WOMEN	TYPE OF CANCER	MEN
+/- since 1980		+/- since 1980
+ 47%	Colon/rectum	+ 55%
+ 182%	Lung	+ 41%
+ 73%	Pharynx	+ 15%
+ 23%	Leukemia	+ 23%
+ 12%	Bladder	+ 61%
+ 139%	Malignant lymphoma	+ 163%
+ 147%	Kidney	+ 114%
+ 182%	Melanoma	+ 294%
- 25%	Stomach	- 14%
+ 133%	Liver	+ 225%
+ 111%	Nervous system	+ 84%
+ 96%	Esophagus	- 19%
+ 85%	Pancreas	+ 64%
+ 21%	Larynx	- 11%
+ 203%	Thyroid	+ 115%
+ 79%	Multiple myelomas	+ 118%
+ 354%	Pleura mesothelioma	+ 224%
+ 97%	Breast	
	Prostate	+ 271%
+ 23%	Uterus	
+ 32%	Ovary	
- 31%	Neck of uterus	
- 4%	Others	+ 13%
	TOTAL FOR ALL	
+ 60%		+ 66%

Source: *Science & Vie* n° 1041

- An important first:** a Belgian team has successfully grafted ovarian tissue in a young woman recently cured of cancer. Chemotherapy and radiotherapy are treatments that can bring on an early menopause and therefore sterility. The team led by Pr. Jacques Donnez had the idea of taking fragments of ovaries before the patient began her treatment. These tissues, which were frozen for six years, were then transplanted back into the patient and her ovaries began to function normally. The young woman has since had the joy of becoming pregnant.

Source: *Santé Magazine* n° 345

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