Chirec
Cancer Institute


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News No. 11
2016

EDITORIAL

With the around 5,000 cancer-sufferers which they take care of every year, the CHIREC CANCER INSTITUTE (CCI) is in effect the largest private cancer treatment centre in Belgium. Urological cancers are amongst the most common, since around 1,000 patients a year attend the various sites of the CHIREC. The constant aim of CHIREC specialists is to provide personalised, high-quality and targeted treatment for each of these patients, accessible to all.

As is the case for each of its Clinics, the Urological Cancer Clinic has not only organ specialists, in particular urologists, medical oncologists, radiotherapists, pathologists, radiologists, nuclear medicine specialists and coordinating nurses, but also carers of all kinds in a multidisciplinary support role, such as in psycho-oncology, dietetics, physiotherapy, rehabilitation, the welfare service, continuing and palliative care, clinical pain management, wellness and self-image.

A pioneer in high-quality cancer care, the CCI has created a "quality charter" and indicators to evaluate various quality parameters, in order to compare them at national and international level.

Through this quality charter, which you will find at the end of this issue of News, every doctor at the CCI undertakes in particular to present each new cancer-sufferer, or patient suspected of having cancer, at a Multidisciplinary Cancer Consultation (COM) to discuss not only the treatment plan but also the diagnostic procedures and follow-up plan. The CCI has recently drawn up a report on 15 years of COMs, which you can also read at the end of News.

The CCI's Urological Cancer Clinic has state-of-the-art technologies dedicated to the treatments of the various types of cancer such as robotic surgery or 3D image fusion radiotherapy. The CHIREC provides them with constant support and allows very significant investments to be made in this area.

Finally, the Urological Cancer Clinic has recently organised "MEETINGS" intended for medical specialists and general practitioners, to present the latest findings and the best diagnostic and therapeutic options at the forefront of international progress.

This newsletter No. 10 is therefore devoted to urological cancers – of the prostate, the bladder and of the kidney – and offers you a summary of the procedures carried out by our specialists and our invited guests on these subjects.

Prof. Thierry VELU
Director of the Chirec Cancer Institute

Version française pages 1 à 18
Nederlandse versie pagina 19-37
English version verso

UROLOGICAL CANCERS

Urological cancers consist of cancers of the prostate, the bladder, the kidney and the male genital organs.

Prostate cancer

Prostate cancer is the most common cancer in men, it affects more than 1 out of 6 men over the age of 50 – the incidence is approximately 15 % and it is the 3rd most common cause of death from cancer in man, which means that most patients do not die of it.

All the latest technologies are available to our teams, such as magnetic resonance imaging (MRI), making it possible to better select patients before considering biopsies to detect early cancers and also to follow and actively monitor the limited, relatively non-aggressive cancers which do not require immediate treatment.

Our teams have access to all the treatment methods such as robot-assisted laparoscopic surgery, brachytherapy, radiotherapy and the use of many new drugs for the advanced stages.

Bladder cancer

Cancer of the bladder and of the urinary tract is the 4th most common cancer in men, the 11th in women but in the latter the frequency is tending to increase due to its association with smoking.

It is the cancer which requires the most management today in view of its very high relapse rate.

The superficial lesions, commonly called "polyps", have a very high relapse rate and must be treated and monitored very regularly.

The infiltrating lesions often require the ablation of the bladder and its replacement with part of the intestine, making it possible to preserve urination via the natural route in order to avoid having a urinary diversion and a bag attached to the skin (urostomy).

Kidney cancer

Kidney cancer quite often affects relatively young men and women.

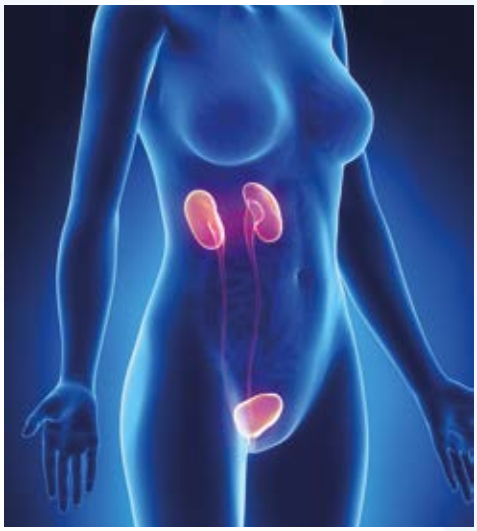
More and more frequently conservative surgery is performed for small lesions. The vast majority of procedures are performed by non-invasive robot-assisted laparoscopic surgery (without opening the abdomen).

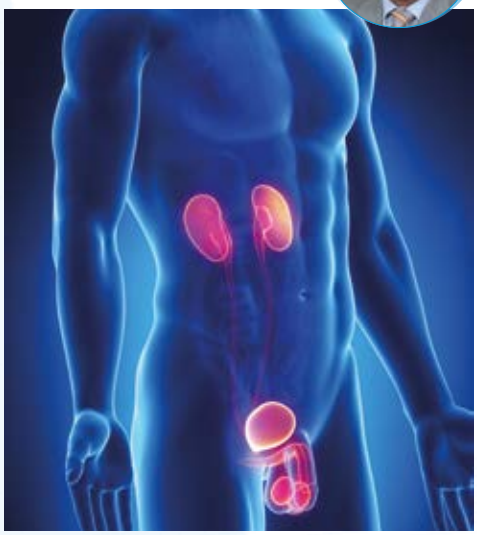
Cancer of the genital organs

Testicular cancer affects predominantly young men between 20 and 50 years of age and must be diagnosed early in order to be curable.

Decisions on the treatment of all urological cancers are taken by a multidisciplinary committee consisting of urologists, radiologists, oncologists, radiotherapists and pathologists. These joint discussions are essential to ensure that such important decisions do not rest on the opinion of a single person.

Prof. Claude SCHULMAN
Urology, CHIREC

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Innovative techniques : robot-assisted surgery
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UROLOGICAL CANCERS

PROSTATE CANCER : QUESTIONS ABOUT A SMALL GLAND ?

The most common cancer in men, prostate cancer has for a number of years benefited from a great deal of progress in both diagnosis and treatment. Questions do nevertheless remain. Several high-level speakers have reported on this progress at the Chirec Cancer Institute Meetings.

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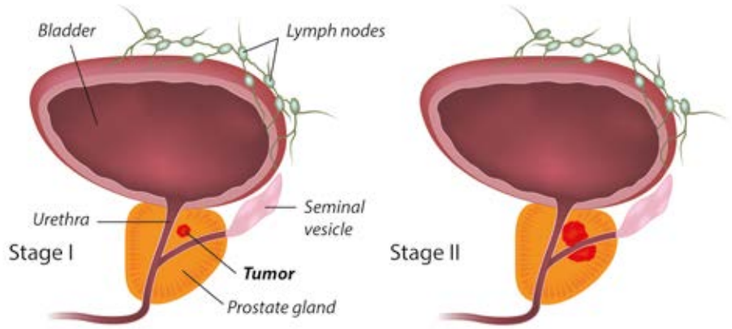
Prostate cancer is the most common cancer in men and the 3rd most common cause of death from cancer in France. Peak incidence is at around 65 years of age. Since the use of the PSA test, the number of new cases diagnosed is becoming more and more localised, explained Dr Lufuma (Clinique du Parc Léopold) in the preamble. Because of screening (not en masse but individually) and the treatment given, the specific mortality rate has been falling since 2005. The attitude adopted has changed since it has been possible to identify the existence of prostate cancers which are unlikely to develop further. More and more relevant use of means such as the clinical biology of PSA, ultrasound, magnetic resonance and transrectal biopsies has contributed to better management of the disease. Further progress is expected: tumour aggressivity markers are being developed and MRIs are being used increasingly. Because of screening (not en masse but individually) and the treatment given, the specific mortality rate has been falling since 2005.

Dr Emmanuel LUFUMA
Urology, CHIREC

• How can it be prevented?

As for any disease, prevention is ideally preferable to treatment. What means are available to us, asked Dr Barmoshe (Cavell). Studies on migrants have shown that prostate cancer did not have only one genetic origin and that dietary habits can interfere with the risk of contracting this disease. As with many other conditions, obesity is an aggravating risk factor. Foods rich in lycopene (tomatoes) and in isoflavones (soya), as well as green tea and pomegranate, have a preventive value probably linked to their antioxidant properties. Studies have looked into the preventive value of selenium and vitamin E. As for the inhibitors of 5-alpha reductase, they have also been studied in prevention : they have shown a moderate reduction in the incidence of prostate cancer but with a potential risk of more aggressive cancers and have not had any clinical involvement.

Dr Sas BARMOSHE
Urology, CHIREC



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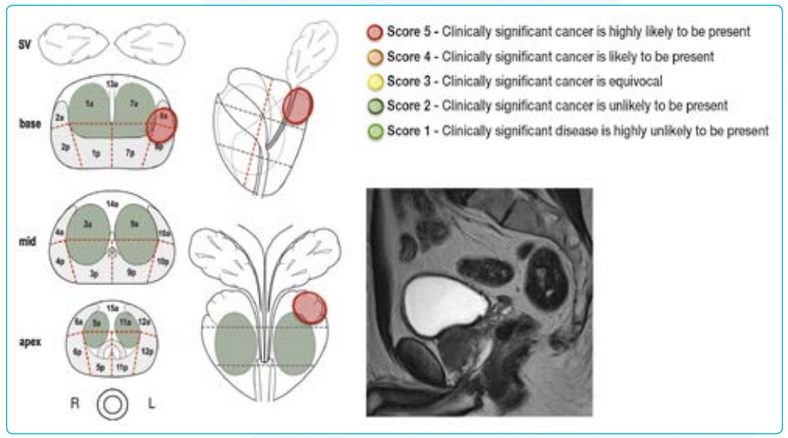
The different stages of prostate cancer

• Increasingly accurate imaging

Magnetic resonance imaging (MRI), explained Dr Salah Ouertani (Cavell-Braine l'Alleud), has become multiparametric and provides anatomical images which enable high-quality functional studies to be carried out, in particular due to neoangiogenesis identification techniques. Diffusion MRI shows areas of high-density cellularity and makes it possible to estimate how aggressive the tumour is. Magnetic resonance spectroscopy provides information on the metabolism, which also contributes to the accuracy of the cancer picture.

Alongside MRI, ultrasound still remains useful. Using both techniques together, to form fusion images, makes it possible to go further still and to draw up a grid of activity scores according to the different anatomical areas of the gland, to better target the suspect areas or areas to be biopsied (illustration below) and to monitor patients under active surveillance.

Dr Salah OUERTANI
Radiology, CHIREC



CX.M.Moore et al - Eur.Urol 2013 ; 64.544-552 – Standards of Reporting for MRI - targeted Biopsy Studies (START) of the Prostate : Recommendations from an International Working Group

Prostatic cartography = standardised radiological report such as the one sent to the urologist before carrying out ultrasound-guided biopsies. The lesions are graded from 1 to 5 according to the degree of suspicion.

• The place of active surveillance

For less aggressive cancers, explained Prof. Thierry Roumeguère (Erasme, ULB), active surveillance is recommended. It is an entirely dynamic approach, which applies to cancers diagnosed as developing slowly but for which a cure is indicated. It is very different from "watchful waiting", he stressed. The problem is identifying the more aggressive cancers which cannot be the subject of active surveillance but require immediate treatment. Magnetic resonance imaging can help with this, as can normograms, charts which make it possible to bring together several criteria in order to refine the evaluation of cancer aggressivity. Several studies have evaluated the benefits of active surveillance: the results obtained vary with the criteria used and any doubt is not entirely ruled out as to the risk for the patient in the case of deferred treatment. The biopsy therefore remains necessary, but that too is not totally immune to errors of assessment. Nevertheless, in the scientific literature only very few data suggest that waiting could result in the patient losing the opportunity of successful treatment. In future, biological criteria such as PSA isoforms are likely to contribute to an even more accurate evaluation of tumour behaviour.

Pr Thierry ROUMEGUERE
Urology, ULB

DID YOU KNOW ?

- Prostate cancer is the most common cancer in men: it affects 1 out of 6 men over the age of 50.
- Not all prostate cancers are may benefit from aggressive and do not necessarily require immediate treatment but active surveillance.
- Cancers of the kidney and bladder affect women as well as men.
- Smoking increases the risk of bladder cancer.
- The role of testosterone is ever more contested as being able to promote prostate cancer.
- Several new drugs have been available in recent years for the advanced stages of prostate and kidney cancer.

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UROLOGICAL CANCERS

PROSTATE CANCER : QUESTIONS ABOUT A SMALL GLAND ?

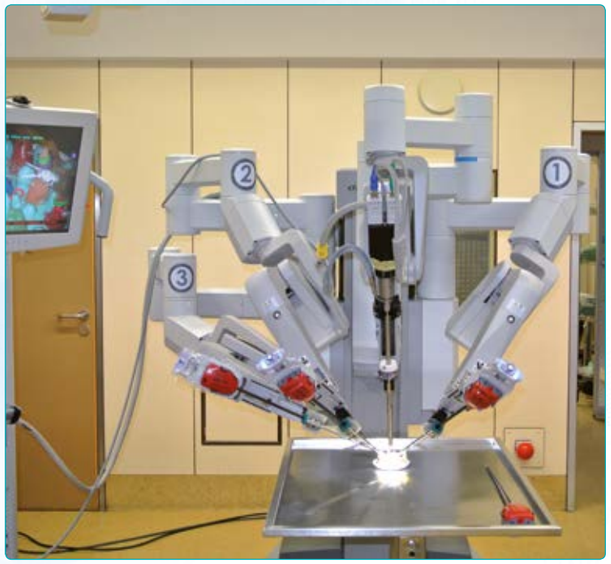
Robot-assisted laparoscopic surgery

• Robot-assisted surgery

Robot-assisted surgery is being used increasingly and its results are very encouraging, explained Dr Naudin (Cavell).
The classification of patients into risk groups is essential in choosing the best individualised treatment stresses Dr J-J Bredael (Cavell-SARE).
For localised intermediate or high-risk tumours, total radical prostatectomy (RP) remains the therapeutic option of choice for patients with a life expectancy of more than 10 years. The surgical treatment for locally advanced tumours (T3) is again in focus by combining radical prostatectomy with extended lymph node dissection and possibly with adjuvant radiotherapy.
In recent years a less invasive route, laparoscopic surgery with robotic assistance, has been used more and more commonly in order to minimise the complications of surgery for prostate cancer, as indicated by Dr Chatzopoulos.

Dr Michel NAUDIN
Urology, CHIREC

Dr Charles CHATZOPOULOS
Urology, CHIREC



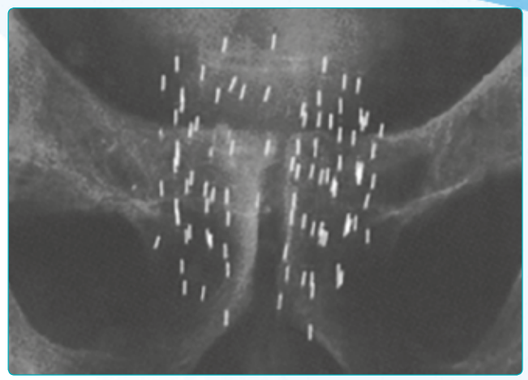
Acquiring this sophisticated equipment is an important investment by CHIREC.

• Other approaches

An alternative is **BRACHYTHERAPY OR CURIETHERAPY**, which consists of introducing radioactive seeds into the prostate under ultrasound control (illustration below). It is used for small, relatively non-aggressive tumours, as mentioned by Dr Corbusier.

Dr Jean-Jacques BREDAEL
Urology, CHIREC

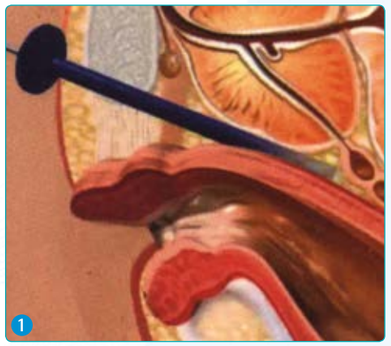
Dr André CORBUSIER
Urology, CHIREC



Brachytherapy – prostate

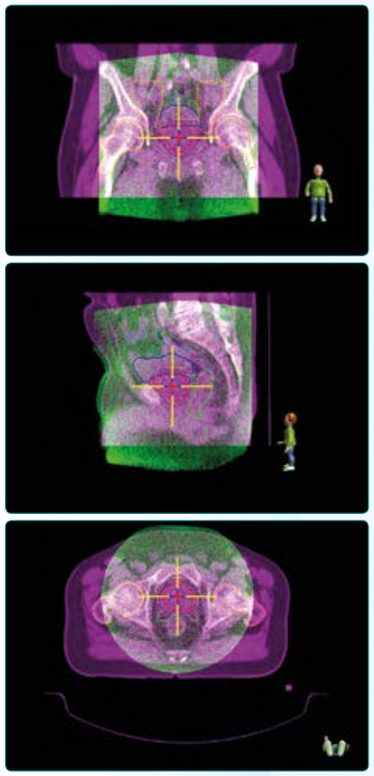
RADIOTHERAPY is used in patients who are not candidates for a surgical approach. Dr R. Burette (Cavell) reports technical improvements in delimiting and modulating the field of irradiation which have considerably increased the effectiveness of the treatment while reducing the undesirable side effects.
The CHIREC is one of the first centres to use an innovative approach for radiotherapy for prostate cancer: in order to reduce the risks of irradiation of the neighbouring organs – and of the rectum in particular – a biodegradable balloon is inserted between the prostate and the rectum. The irradiation of adjacent organs is reduced by about 70 %. CHIREC is pioneer in the use of this innovative approach in Belgium.

Dr Richard BURETTE
Radiotherapy, CHIREC



Biodegradable balloon : (1) insertion
(2) deployment to protect the neighbouring organs before radiotherapy

CHIREC is pioneer in the use of this innovative approach in Belgium



Radiotherapy : a 3D control interface by fusion imaging of the reference CT scan (fuchsia) and that of the linear accelerator

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UROLOGICAL CANCERS

PROSTATE CANCER : QUESTIONS ABOUT A SMALL GLAND ?

• Hormone resistant cancers

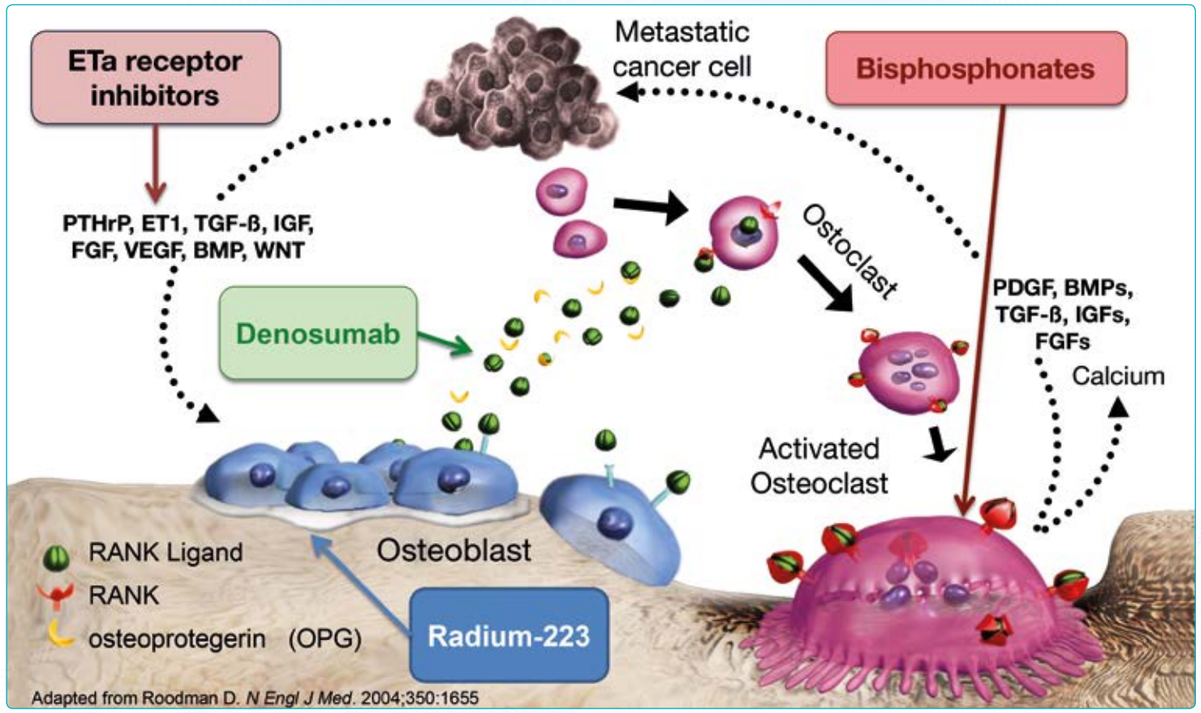
Hormonal castration using drugs is the conventional treatment for the advanced stages. The onset of resistance to hormone therapy remains a major problem. Docetaxel (Taxotere), used for many years, is effective but relatively toxic and today we are turning towards new substances such as abiraterone (Zytiga), which is proving to be very effective and Enzalutamide (XTandi).
When there are bone metastases, substances promoting bone reconstruction are added to the anti-cancer treatment: either a bisphosphonate such as zoledronate (Zometa), or a more recent treatment denozumab (XGeva). A particular galenic form of radium 223 (Xofigo) is also available for the treatment of bone lesions.

Dr Thibaut SAUSSEZ
Urology, UCL

• Bones : a vital target in prostate cancer

Bones are particularly severely at risk in men suffering from prostate cancer. There are three mechanisms that cause this. First of all, a "natural" bone deficit develops with age, evolving towards a state of osteopenia and then osteoporosis. Secondly, this bone deficit is exacerbated by the anti-androgen treatments used in hormone-sensitive prostate cancer. Lastly, a third cause of changes in the bone structure is the development of metastases. Treatments have emerged to deal with each of these mechanisms and these are constantly being improved: they all have the aim of reconstructing bones, avoiding complications (fractures and crush fractures) and reducing the development of bone metastases : it is therefore useful to take action and strengthen bone structures even before metastases appear in the bones !

Bone metastases actually develop in the context of a vicious circle involving three cell types : osteoblasts (cells that build bone), osteoclasts (cells that destroy bone) and tumour cells. There are various factors that allow them to interact (see the figure opposite). Treatments have been developed to target various steps in this vicious circle. In particular, Denosumab (Xgeva) is a monoclonal antibody which blocks the RANK ligand, an osteoclast differentiation factor which is produced by osteoblasts ; zoledronic acid (Zometa) is a bisphosphonate, which blocks osteoclast activity ; radium-223 (Xofigo) is a radioisotope which works by becoming concentrated in osteoblastic areas ; finally, endothelin (ET1) receptor inhibitors (ETA) are currently being developed and evaluated.



Treatments targeting bone metastases

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• Keep moving !

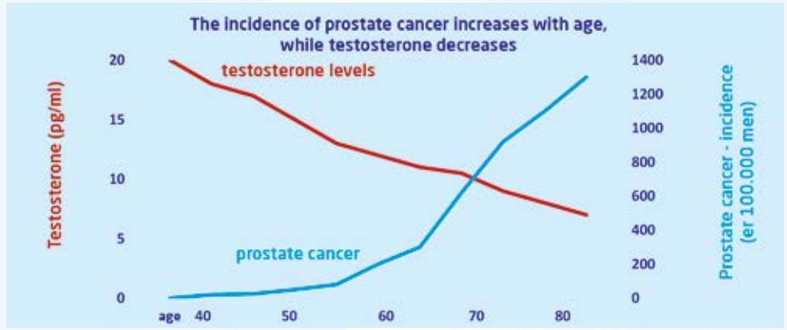
Hormone treatment of prostate cancer has side effects which adversely affect quality of life. Dr Ben Addi (Parc Léopold and SARE) explains to us that these complications are metabolic syndrome, (hypertension, diabetes, hypercholesterolaemia), cardiovascular diseases, osteoporosis, mood disorders, fatigue, diabetes, erectile disorders and reduced libido.
Intermittent hormone therapy is also an option of choice. The treatment of some side effects can be considered by administering vitamins D and Ca and by phosphodiesterase inhibitors, etc. The change in lifestyle (nutrition, physical exercise) is a key measure of this prevention. Eddy Kuypers, a graduate in physical education, has developed physical activity programmes with the aim of reinforcing both the strength and flexibility of the muscles, improving balance and supporting the cardiovascular and respiratory functions.

Dr Taoufik BEN ADDI
Urology, CHIREC

• Testosterone, friend or foe?

The principle of castration emerged a long time ago, explained Prof. Claude Schulman (Cavell), following the double finding by Huggins, who received a Nobel Prize in 1966, of the regression of metastatic prostate cancer after castration or administration of oestrogens, on the one hand, and of increased growth under the effect of testosterone of untreated prostate cancer. The first finding is accurate and well-documented and remains the basis of the treatment of advanced/metastasised cancers.
The second finding, on the other hand, is very poorly documented. Thus, for example, the number of prostate cancers increases with age, whereas the level of testosterone decreases. A review of 18 studies shows that testosterone has no influence and some even suggest that the risk of prostate cancer, as well as the aggressivity of an existing cancer, increase if the levels of testosterone decrease. In patients who have undergone radical prostatectomy we see the levels of testosterone, initially very low, rise after one year. The role and mechanisms of the regulation of testosterone are therefore insufficiently well-known and deserve additional studies.

Prof. Claude SCHULMAN
Urology, CHIREC



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UROLOGICAL CANCERS

KIDNEY CANCER, HOW FAR ARE WE NOW?

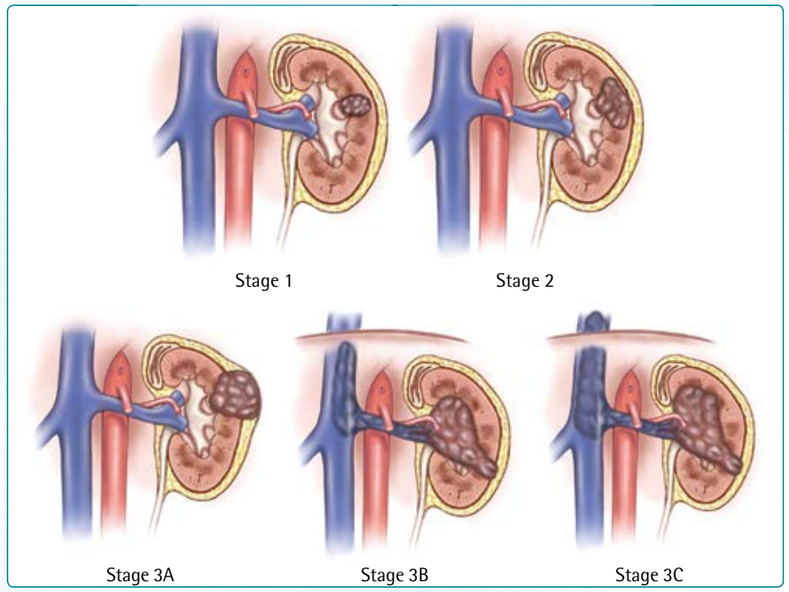
Kidney cancer AFFECTS PATIENTS OF BOTH SEXES and its incidence is increasing in Belgium (1500 cases per year). How do we approach it at the beginning of the 21st century?
The clinical picture of kidney cancer has changed significantly, found Dr Charles Chatzopoulos (Cavell). The patient who suddenly experiences haematuria, who has pain and who is found to have a large renal mass is seen more and more rarely. This diagnosis is often made with the chance discovery of a small renal tumour during a general examination. How should we approach both cases?

• Conventional surgery, laparoscopy or robot-assisted laparoscopy?

There is no doubt that large tumours which invade the renal fat, abdominal vessels and aorto-abdominal lymph nodes (stage 3) must be treated using open surgery. T2 tumours, limited to the kidney, can be operated on by laparoscopy. Robotic surgery is a considerable support in this. The same results are obtained as in open surgery but with less pain and shorter hospitalisation. As for small tumours, in particular polar ones, they can be the subject of partial nephrectomy provided that the pre-operative assessment has made it possible to locate them precisely and to evaluate whether they can be resected. Robotic assistance provides comfort and accuracy.

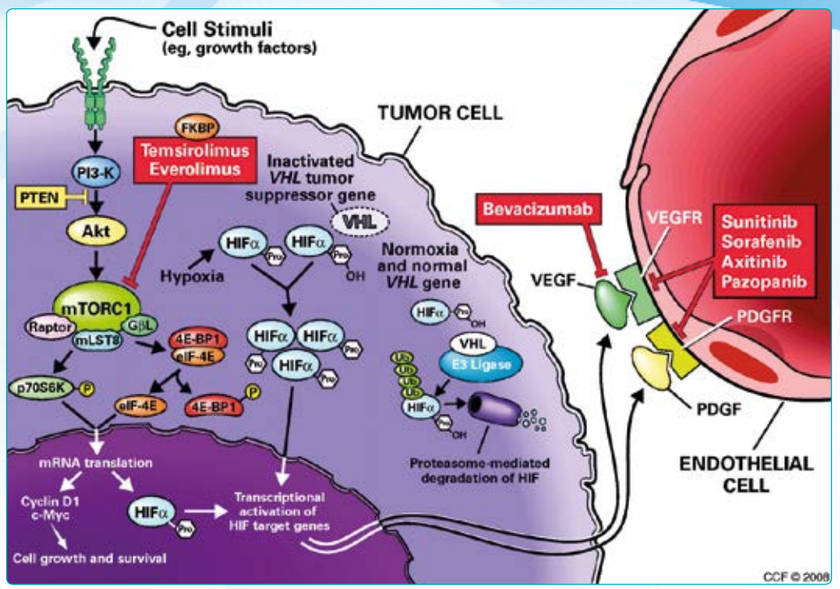
• Metastatic kidney cancer

Where metastases are present (stage 4), treatment with anti-cancer drugs, which have the advantage of reaching the entire body, is proposed.
The number of effective medical treatments has "exploded" since 2007. Before this date there was little hope of effective treatment for metastatic kidney cancer due to its resistance to chemotherapies and little efficacy from immunotherapy. Since then many drugs have become available, having a major impact on controlling the disease: the first treatment administered to these patients can therefore provide prolonged control of their illness, in half of them. In case of failure or progression, we can then pass to a second treatment, and so on, which would make it possible to significantly prolong their overall survival. These remarkable drugs are not chemotherapies: they are part of a new type of treatment called "targeted therapies".
It is thanks to the research carried out during these few decades that various molecular pathways have been explored: not only those which lead to a normal cell transforming itself into a cancer cell, then proliferating in an uncontrolled manner, but also those which accompany the carcinogenesis process, such as those which stimulate the formation of new vessels for supplying oxygen and all the "nutritive" elements necessary for the development of the cancer cells ("neoangiogenesis" process). The new targeted therapies act by blocking key elements of these molecular pathways. Those used successfully in renal carcinoma can be divided into two groups according to their targets. These therapies and their targets are illustrated in the figure opposite.



The difference stages of renal cancer. Chaan et al., Am J Roentgenol 191 : 1220-32, 2008.


Dr Charles CHATZOPOULOS, Urology, CHIREC and Pr Thierry VELU, Medical Oncology, CHIREC



Mode of action of targeted drugs. B. Rini, J Clin Oncol 27 : 3225-34, 2009.

• Targeted therapies

Therapies targeting molecules which stimulate neoangiogenesis

The first group targets the neoangiogenesis pathways (see above). The stimulation of new vessels comes mainly from the fixation of a soluble factor, VEGF, produced by the tumour cells, on a receptor (VEGFR) expressed on the surface of the endothelial vascular cells (see figure above). VEGF and its receptor VEGFR can be targeted by the following substances:
- bevacizumab (Avastin) is a monoclonal antibody targeting VEGF,
- sunitinib (Sutent), sorafenib (Nexavar), axotinib (Inlyta) and pazopanib (Votrient) are small molecules blocking the receptor of VEGF (VEGFR), which is a tyrosine kinase. These substances are less specific than the antibodies and will interact with other tyrosine kinases, which will have the consequence of them each having a spectrum of action and side-effects which are fairly different from each other.

Therapies targeting the cancer molecular pathway of rapamycin (mTOR)

The targeted anti-cancer therapies of this group inhibit the same target as rapamycin, also called sirolimus, developed as an immunosuppressant used in the prevention of rejection of the graft after transplantation. Their common target is the mTOR protein (mammalian target of rapamycin) (see figure opposite), which forms part of a molecular pathway stimulating the survival and proliferation of the cells: it is the phosphoinositide 3-kinase pathway (PI3-K) and AKT, regulated by the product of the suppressor gene of the PTEN tumour. As this pathway is particularly active in renal cancers, two anti-cancer drugs targeting mTOR have been developed successfully: temsirolimus (Torisel) and everolimus (Afinitor).

As discussed above, these new targeted therapies have all come to light in less than ten years, contrasting with an almost total absence of effective treatment previously! They can be used one after the other, in a sequence which takes into account various elements, such as prognostic or histological factors, or even such as the general condition or age of the patient. Far from stopping at such good results, the research laboratories are still evaluating many other substances, some of which will come to improve even further the control of the cancerous pathology.

Dr Fabienne BASTIN
Medical Oncology, CHIREC

Pr Thierry VELU
Medical Oncology, CHIREC

Websites to visit

guidelines
www.uroweb.org

Association française d'urologie (AFU)
www.urofrance.org

National Comprehensive Cancer Network
www.nccn.org

Fondation contre le cancer - Belgique
www.cancer.be

Agence d'expertise sanitaire et scientifique en cancérologie
www.e-cancer.fr

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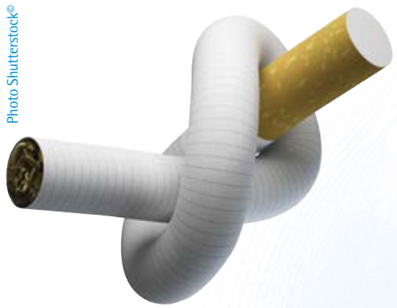
UROLOGICAL CANCERS

BLADDER TUMOURS

Cancer of the bladder and urinary tract is the 4th most common cancer in men, and the 11th in women, but in the latter the frequency tends to rise with the increase in smoking among women. It is the cancer which, today, requires the greatest management in view of its very high relapse rate.



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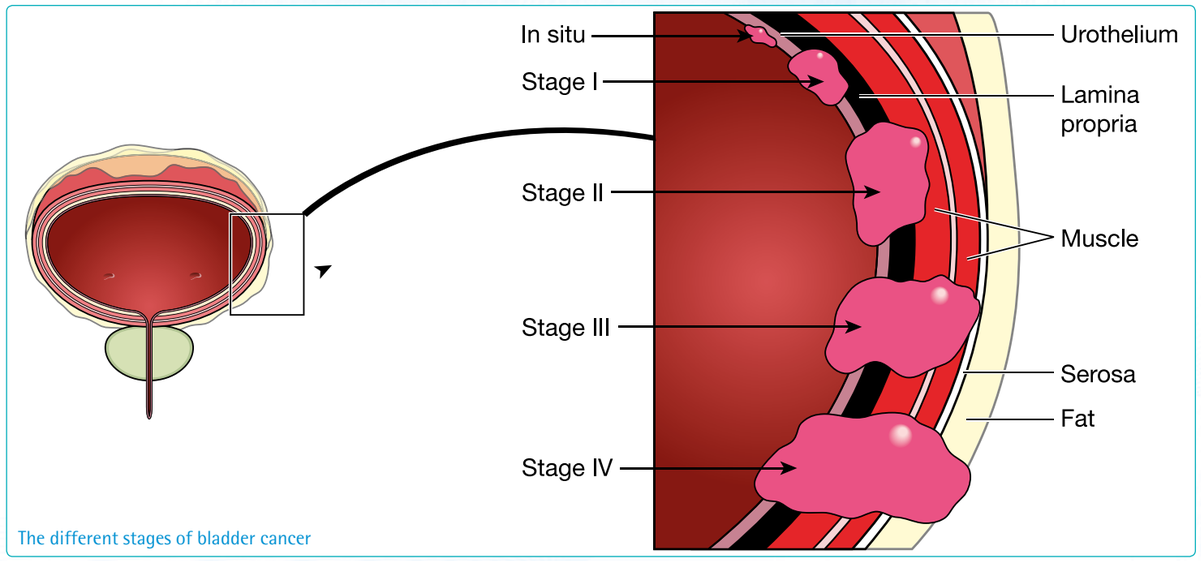
• Superficial tumours

Superficial lesions, commonly called "polyps", have a very high relapse rate and must be treated and monitored very regularly.
The diagnosis, explained Dr K. Entezari (Parc Léopold), is initially sought in 85 % of cases after haematuria and in 20 % of cases due to urgent micturition. But the degree of haematuria is not proportional to the severity of the cancer. A complete investigation is always necessary. Cystoscopy is positive and its sensitivity is increased by techniques such as photodynamic detection under blue light. This detection also makes it possible to treat the problem sooner, which results in a reduction in the risk of relapse. Another detection technique is narrow band imaging, NBI, which reinforces the contrast between healthy tissue and abnormal tissue, which is more vascularised.
The cytological examination confirms the nature of the cancer, even though it is more sensitive for high-grade cancers than for others.
CT urography (uroscan) enables a morphological evaluation to be carried out with exploration of the ureters and kidneys.
A classification is drawn up according to the degree of infiltration, while the degree expresses the aggressivity of the tumour. Clinically, the majority of tumours are superficial and fewer than 15 % of them are immediately aggressive. Metastases are found immediately in 10 % of cases.

Dr Kim ENTEZARI
Urology, CHIREC

DIAGNOSIS OF SUPERFICIAL TUMOURS OF THE BLADDER
• 85 % of cases : haematuria macroscopically or microscopically without correlation with cancer aggressivity
• 20 % of cases : "micturitional urgency", more common in high-grade cancers or cancers in situ (CIS)
• Cystoscopy ++++
• Cytology, more sensitive for the high grades
• Uroscan
• Evaluation of the condition of the ureters and the kidneys



The different stages of bladder cancer

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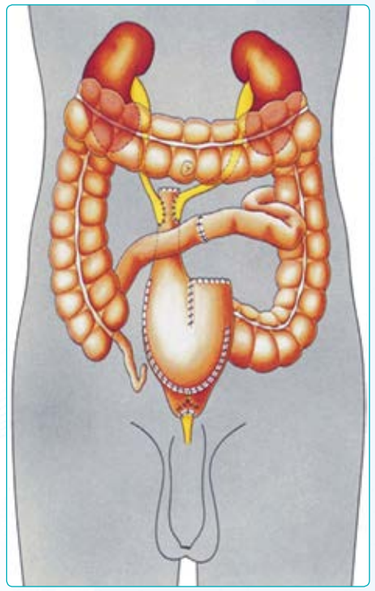
• Infiltrating tumours

Infiltrating lesions often require ablation of the bladder and its replacement by a segment of the intestine allowing micturition to continue by natural means in order to avoid a bag being attached to the skin.
The treatment of infiltrating tumours of the bladder has also developed and is seeing its prognosis improve progressively.
Invasive bladder cancers affecting the muscular layer require radical cystectomy.
Currently open surgery remains the gold standard of the treatment.
Recently new less invasive laparoscopic techniques with robotic assistance have been developed.
The aim is to carry out this surgery in a totally intracorporeal way while offering the same oncological benefits as open surgery. The series published in the past 10 years show that robot-assisted surgery is enabling us to obtain very encouraging results with a comparable long-term survival rate for a low level of complications.



Bladder replaced with a segment of intestine

• Medical treatment of the infiltrating tumours of the bladder

Even after radical cystectomy a certain number of patients with a tumour of the bladder infiltrating deeply into its wall or the adjacent pelvic structures will develop metastases within the following two years. Most of them die of it. For these patients, chemotherapy carried out before surgery, called neoadjuvant chemotherapy, makes it possible to improve their survival, which at 5 years increases from 40-45 % to close to 60 %. Two chemotherapy regimens dominate practice: either a combination of methotrexate, vinblastine, adriamycin and cisplatin (MVAC), or a combination of gemcitabine and cisplatin (GC).
Whereas many data have shown the benefits of neoadjuvant chemotherapy of this kind, there is still only little data in favour of chemotherapy performed after surgery (adjuvant).
When radical cystectomy cannot be carried out because surgery is contraindicated or the patient refuses, transurethral resection of the bladder tumour can be proposed followed by a combination of radiotherapy with chemotherapy.
Finally, polychemotherapy is also used in a metastatic situation with response rates reaching 50 %, and a significant increase in patient survival.

New routes in view

We can still hope to see the results improve further in the short or medium term because of new therapeutic approaches which it appears will be ready to implement soon. Around twenty target substances, already targeted in cancers of other organs, have been suggested for bladder cancers: these are either mutations inactivating suppressor genes of tumours such as p53 or Rb, or changes in metabolic pathways such as that affecting mTOR : in 60 % of these molecular changes, therapies specifically targeting these changes have already been approved in other indications, and are being evaluated in cancers of the bladder. Here as elsewhere in cancerology progress is relatively slow but very real.

Pr Thierry VELU
Medical Oncology, CHIREC

Dr Henri BONDUE
Medical Oncology, CHIREC

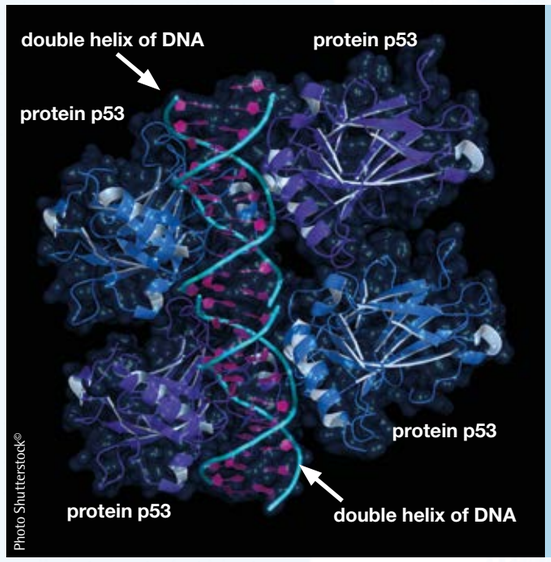


Photo Shutterstock©

Tumour suppressor gene

p53 is the most commonly mutated tumour suppressor gene in human cancerology (more than 50 %), as is the case with cancers of the bladder. As the figure opposite shows, the protein it encodes is a transcription factor binding the double helix of DNA : in this way it controls the main cell functions, such as mitosis or programmed cell death (apoptosis). Understanding the molecular mechanisms involved in cancerogenesis has made it possible to develop targeted treatments which are revolutionising the treatment of cancer.

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UROLOGICAL CANCERS

MEETINGS :
Altogether against urological cancers – Photo album

Meetings of the Chirec Cancer Institute devoted to urological cancers drew a large audience of 320 participants, two thirds of whom were General Practitioners.
As for all editions of Meetings, each session was moderated by a team including one General Practitioner.

Prof. Thierry VELU,
Quality revolution in oncology

Drs Jean-Jacques BREDAEL, Richard BURETTE
and André CORBUSIER

Mr Eddy KUYPERS

The philosophy of the Meetings

Prof. Claude SCHULMAN, Prof. Elie COGAN
and Dr Michel HANSET

Drs Michel VERMEYLEN, Patrick VAN LEER
and Henri BONDUE

The control room

Drs Michel NAUDIN, Kim ENTEZARI
and Serge VANDERROOST

Prof. Thierry ROUMEGUERE, Drs Richard BURETTE,
Nadine CARETTE and Michel LIBERT

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St-Anne St-Rémi Clinic
Bd Jules Graindor, 66
1070 Brussels
T +32 2 434 31 11

New Hospital on Delta site
Bd Triomphe, 201
1160 Brussels
Opening planned for 2017

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CHIREC CANCER INSTITUTE VIEW ON THE "QUALITY REVOLUTION IN ONCOLOGY"

Multidisciplinary Tumour Boards (MTBs) should be made systematic to offer optimum treatment to patients.

15 years of multidisciplinarity at the Chirec Cancer Institute (CCI) are revolutionising quality in oncology

The days when treatment was decided by a single doctor are over : in the nineties, a patient still had a greater probability of being treated by surgery, radiotherapy or by chemotherapy depending on the specialist he/she consulted ! The KCE, Federal Centre of Expertise in Healthcare, has just published a report covering 10 years of Multidisciplinary Tumour Boards (MTBs), financed by INAMI [National Institute for Sickness and Disability Insurance] since 2003 : bringing together the various health professionals, qualified doctors and others, with these Consultations having the aim of discussing patient files in a multidisciplinary way.
The Chirec Cancer Institute (CCI) is itself celebrating 15 years of MTBs. Chirec's first MTBs started in 1999. Today, the CCI organises more than **30 MTBs** per month, which overall discuss more than 2,000 files per year: with all the cancer specialists taking part actively, regularly covering 25 or 30 in a single session!
Encouraged by this experience, the CCI wishes, through its Director, Prof. Thierry Velu, to make recommendations going much further than the KCE.

Make the MTBs OBLIGATORY

The CCI believes that each patient has the RIGHT to benefit from a multidisciplinary consultation on their medical file. This is the reason why, since 2008, the CCI has drawn up a Quality Charter, signed by all the health professionals, in which the latter undertake to discuss ANY NEW PATIENT suffering from or suspected of suffering from cancer. In March 2010, in a letter to Prof. Thierry Velu, Director of the CCI, the Ordre des Médecins [Belgian Medical Association] wrote, through Dr J.-P. Barroy, Chairman of the Council of the Medical Association of Brabant : *"the Board not only gives a favourable opinion as to the proposal for this charter to be signed by all those caring for patients at the CHIREC and the SARE suffering from cancer, but also expresses its strongest encouragement with regard to this initiative".*

Discuss files in MTBs BEFORE performing any surgery

Beyond the patient's treatment plan, the discussions in MTBs should start systematically before surgery because international recommendations regularly define different clinical situations where patient survival, or the patient's quality of life, is improved if a medical treatment is administered before any surgery takes place *(neoadjuvant approach)*. To go further, it is even recommended that the diagnostic strategy to be used be discussed to confirm a diagnosis of cancer *(for example, puncture, biopsy, exeresis, more aggressive surgery, or, on the other hand, simple monitoring)*.
Convinced of the benefit of extending access to the MTBs far earlier in the care trajectory, the CCI wanted these meetings to provide recommendations on the diagnostic procedures to follow, on the treatment plan and for follow-up. To this end, the CCI included in its Quality Charter an undertaking by doctors to present all their patients suffering from cancer, or suspected of being so, **BEFORE** any treatment. 170 doctors from the Chirec have signed the CCI Charter to date.

Hold "SPECIALIST" MTBs

So that the best specialists can take part in the MTBs, the CCI insists on organising "specialist" MTBs, as opposed to "general" MTBs. Therefore, a MTB dedicated to a given oncological sector will enable higher-quality management than a general MTB: due to the specialist subjects treated there, it will stimulate the participation of all the specialists concerned, and will enable a more in-depth discussion of the clinical file. For example, the Clinic within the CCI has been chosen as a pilot unit evaluated by the Ministry of Public Health in the context of the "Quality and Patient Safety Coordination" agreement. 2 of the 11 quality indicators adopted are, precisely : "the proportion of women suffering from breast cancer whose case has been discussed in MTB before any treatment" and "the proportion of MTBs at which cases of patients suffering from breast cancer which are not dedicated only to breast cancer are discussed."

Develop MTBs using TELECONFERENCING so that the general practitioner is included

Ideally, for any patient who is the subject of a MTB consultation, the point of view of the doctor in attendance, who knows him/her the best, and that of all the specialists present should be combined. Currently the doctors in attendance are largely the ones who are absent from the MTBs, mainly for reasons of lack of time. To this end, the use of videoconferencing, as suggested in the recent report of the KCE, seems to provide an opportunity. This system has been working at the CCI for 6 years, which enables systematic multi-site collaboration specific to the Chirec. We are planning to open up this system to external doctors, in particular to the doctors in attendance, in order to guarantee the optimum overall care management that the CCI wants to offer to all cancer-sufferers.

The Quality Charter put in place by the Chirec Cancer Institute since 2009 and signed by 170 doctors from the CHIREC to date.
It has been approved by the Board of the National Medical Association, which has expressed very solid support for this initiative.

Chirec Cancer Institute

QUALITY CHARTER

This Charter defines the quality principles to which all the people working at the Chirec Cancer Institute (CCI) must adhere in order to provide overall management of care for cancer patients which is high-quality, personalised and multidisciplinary, encompassing all actors (health professionals or others), both from the point of view of care given and of the support and advice provided for patients and those close to them.

The Charter has received the approval of the authorities of the CHIREC, whose teams work at the Chirec Cancer Institute (CCI), in order to achieve the level of excellence that the CCI has set as its objective.

It is in this light that all those who adhere to the Charter undertake to :

1. promote diagnostic and therapeutic approaches based on **international recommendations** (good clinical practice and *evidence-based medicine*), such as those in the Manuel de Soins Oncologiques [Cancer Care Manual] of the CCI (CHIREC), and written in the context of the Care and Oncology Programmes (PSO) approved by the Ministry of Public Health ;
2. discuss the case of **any new patient** suffering from cancer or suspected of suffering from cancer, **before treatment** (except in the case of an emergency) in the context of a **Multidisciplinary Tmour Board** (MTB), and take part in it personally (except in the case of being exceptionally prevented from doing so), in order to propose the **best treatment strategy** for this patient (planned personalised care), based on the care trajectories defined according to the type of cancer. This implies the respect and development of a **team spirit** within the CCI and a close collaboration with the **general practitioners** in attendance to ensure an optimum quality hand-over for care at home ;
3. provide the patient with **specific support** at the time when the diagnosis of cancer is given, in particular by being available for the patient and/or those close to him/her or his/her representatives, **listening** to the patient, and, insofar as possible, giving him/her clear and appropriate **answers** to the questions asked.
4. give the patient the most rapid access possible to the **most effective and latest therapeutic means,** and preferably within the CHIREC, if these means are available there, while respecting the patient's freedom to choose ;
5. **discuss the patient file again within a MTB** every time that the clinical situation so requires, and each time that a medical approach diverges either from the care plan drawn up for this patient within the MTB, duly documented and explained in the patient file, or from the recommendations taken from the Cancer Care Manual ;
6. include in the patient **file** the diagnostic means used, the personalised care plan drawn up by the MTB and any other modification which may be made during the treatment, according to the clinical course of the patient's disease, promoting the use of a computerised medical file ;
7. respect **patient rights**, and adhere to **ethical principles** in healthcare ;
8. **inform** the patient, in particular of the approaches proposed by the MTB ;
9. provide the patient with the care to which he/she is entitled in the context of his/her care programme, while **respecting his/her wishes** and preserving his/her **dignity** and **privacy** ;
10. inform the patient of the different competences which the **support care offers** (psycho-oncology, nutrition, pain relief, rehabilitation, welfare support, continuing care, etc.) and to integrate this multidisciplinary approach in the patient's treatment plan, throughout his/her care management ;
11. provide the patient with **continuity of care**, whether this is in particular between the out-patients' department and hospitalisation, between doctors or between care institutions ;
12. work together **to register** cases of cancer patients, in particular through the MTBs ;
13. participate in and promote **ongoing training** of all the parties involved, in particular through training sessions organised in-house ;
14. accept participation in **quality controls**, audits or satisfaction surveys and accept any internal or external evaluation of the activities carried out in diagnosis and cancer care within the Chirec Cancer Institute ;
15. ensure total **transparency of the fees** and costs associated with the treatment. In the case of **fee supplements** being practised, agree to limit or waive them for some patients at the request of their referring doctor, in such a way as to facilitate their access to full care management by the Chirec Cancer Institute ;
16. finally, contribute to the improvement of internal and external **communication** and to external **visibility**.

I, the undersigned, adhere to the principles listed above and agree to comply with all the points in the context of care practised within the Chirec Cancer Institute –CCI.

Date :

Sector of activity – speciality :

Surname and firts name :

INAMI agreement No :

Stamp :

Signature :

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THE SUPPORTATIVE CARE AT THE CHIREC CANCER INSTITUTE

4th February 2015 was World Cancer Day, a disease that affects almost one in two people during their lifetime. On this occasion, Prof. Thierry Velu, Director of the Chirec Cancer Institute (CCI), wished to reply to the invitation from Chirec Goal by highlighting the support services for which a coordination and reflection group has been established in recent years, under the guidance of its coordinator, Dr D. Bouckenaere.

These days, the objective in the treatment of our patients who have relapsed is two-fold : to enable them to live with their cancer not only as long as possible but also in the best possible way. It is of no use living for a long time if this means living badly... This strategy, which may seem obvious, is not so obvious however, because not so long ago the only objective of medical research was to prolong life, without studying the quality of life at the same time. Now, fortunately the treatment philosophy has changed, and we are proud to present to you here the support services team of the CCI.

Chirec
Cancer Institute

The support services in oncology are essential because their primary aim is to improve the support provided for our patients and therefore for their quality of life.

Explanation given by Dr Dominique Bouckenaere
Pain Management, Continuing Care, Coordinator of the support services group from the Chirec Cancer Institute

	CAV	EXT	CPL	EXT
COORDINATING NURSES	Z. Balci		D. Madaleno	5865
ONCO-PSYCHOLOGY	D. Grulois P. Putseys	4840 4840	D. Grulois	5765
LIAISON PSYCHIATRY	Dr J.-P. Pennec Dr S. Gallego	4340 4340	Dr S. Gallego	5550
PHYSICAL MEDICINE AND REHABILITATION	Dr N. Biltiau	4671	Dr M. Goossens Dr Dongliang Qin	5375
PHYSIOTHERAPY AND LYMPHATIC DRAINAGE	F. Nicaise J. Harfouche P. Steffen	4638 4839 4638	S. Gadenne E. Mohet	5440 5440
NUTRITION	C. Hallez L. Teruzi Dr Ph. Langlet Dr S. Roland	9778 6036 4273 4273	C. Hallez V. Everaert S. Dardenne	9778 5968 5689
WELFARE SERVICE	A. Magos	6219	M. Dhyon	5357
PAIN MANAGEMENT AND PAIN CLINIC	I. de Groeve (inf.) Dr M. Duchateau Dr F. Lamesch	6972 4273 4273	Dr L. Fodderie Dr D. Bouckenaere Dr A. Deltell Dr V. Macquaire Dr A. Mazic de Sonis Dr J.-P. Van Buyten P. Vienne (kiné.) C. De Greef (inf.) S. Hermans (psy.)	5089 5764 5087 5126 5471 5374 5374 5370 5540
CONTINUING AND PALLIATIVE CARE	I. de Groeve (inf.) D. Grulois (psy.)	6972 4840	M. Ronsse (psy) D. Grulois (psy.)	5765 5765
AESTHETIC AND WELLNESS CARE	«M.Comas (cosmétologie)»	2000 (City Clinic)	S. Leroy	5440
INTEGRATIVE MEDICINE	Dr I. Theunissen	2000 (City Clinic)	Dr A. Mazic de Sonis	5471
SPEECH THERAPY			M.-A. Vanganbek	5549
STOP SMOKING CLINIC			Dr J. Coulon	5560
CHILD SUPPORT CENTRE	D. Grulois (psy.)	4840	D. Grulois (psy.)	4840
SUPPORT GROUP MEETINGS	Dr D. Bouckenaere D. Grulois (psy.) C. Henne (psy.) F. Bastin (expert) V. Mendez (expert) F. Nicaise (kiné.) D. Madaleno (inf)	5764	Dr D. Bouckenaere D. Grulois (psy.) C. Henne (psy.) F. Bastin (expert) V. Mendez (expert) F. Nicaise (kiné.) D. Madaleno (inf)	5764

SARE	EXT	HBW	EXT	NCB	EXT
C. Delescaille	2697	L. Vaudon	9098		
N. Chapeaux	2771	A. Pohl	9979		
A. Ferremans (secr.)	3541				
Dr R. Ricci Risso	2688	Dr L. Delaunoy	9072		
Dr Fl. Nae D. Burlot J. Delmotte V. Lissassi C. Maricq	2677 2794 3855 3855 3855	C. Graffe M. Gillieaux M. Glibert J. Grumiaux M. Normand	9227 9227 9227 9227 9138	D. Coolsaet	2113
K. Sonck C. Van Huffel	2753 2753	C. Hallez V. Capelle S. Chevalier	9778 9571 9037	C. Hallez	9778
A. Wasowski	3946	A.-S. Peeters	9004		
Dr B. Vanderick J. Laurent (inf.)	2619 2824	Ph. Hendrickx E. Guntz	9972 9008	Dr I. Andrianne Dr G. Bejjani Dr T. El Hor	2117 2370 2129
Dr M. Willocx C. Arezzi N. Chapeaux (psy.)	2743 2742 2771	Dr C. Finet A. Pohl (psy.)	9982 9979		
C. Detroy	2759	M. Genicot	9114		
Dr I. Schaub (hypnose)	2617				
Dr E. Watelet	2726			Dr C. Walravens	2268
		Dr Cl. Finet A. Pohl (psy.)	9979		

People facing cancer live with upheaval from the physical, emotional, family and social points of view. To meet these multiple needs, the support services offer comprehensive multi-professional assistance, which complements the cancer treatments and is accessible from the moment that the diagnosis is announced throughout the patient's cancer journey.

The cancer support services are one of the transversal groups of the Chirec Cancer Institute. They bring together professional approaches as varied as psycho-oncology, rehabilitation, physiotherapy, nutrition, the welfare service, the pain clinic, continuing and palliative care, speech therapy and aesthetic care, etc.

These different disciplines contribute to relieve the pain and the other physical symptoms, reduce mental and spiritual suffering, promote better tolerance of the cancer treatments and promote communication with the patient and those close to him/her. According to the treatment plan, the aim may be functional rehabilitation or care to make them more comfortable.

The support services group brings together representatives of these various disciplines from the different sites of the Chirec. The objective is to initiate multidisciplinary and intersite projects such as Oncopsy (a psycho-educational support group) or the Child Support Centre (l'Espace Enfants), to stimulate the initiatives tried and tested in this area and to promote the integration of the support services in general cancer care. In this context, the emphasis is on the early detection of psychosocial need, accessibility of the support services and coordination between the various parties involved.

The support services make excellent cancer care possible !

FBSP Fédération Bruxelloise de Soins Palliatifs et Continus

Dr Dominique Bouckenaere is Presidente of the Brussels Federatiob of Palliative Care FBSP
www.fbsp-bfpz.org et
https://www.facebook.com/soinspalliatifsbruxelles
if you wan't to like it !

The telephone numbers shown must be preceded by 02 – 434 for calls to the CHIREC from outside.

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A COMPREHENSIVE SUPPORT CENTRE COMPLEMENTING HOSPITAL CARE: THE NPO (ABSL) RE-SOURCE.

Photo Shutterstock©

As it is in the Chirec's DNA to provide its patients with bespoke cutting-edge services, it was only natural for the Group to decide to support the Brussels region's 1st comprehensive wellness centre for patients suffering from cancer: the NPO (ASBL) Re-source, Chirec Delta Center.

More precisely, it is a holistic support concept that draws its inspiration from the "Maggie's Centres" that exist in the UK.

The Re-source residence is a joint initiative by the Director of the CCI, Professor Thierry Velu, one of his patients, Janik Nicodème and Dr Veronica Mendez.

This NPO (ASBL) offers patients and their family circle a place close to the hospital where they can find emotional support, share with former patients, get advice from healthcare professionals and benefit from psychological, physical and social rehabilitation activities, in peaceful surroundings.

The entire project is developed with the medical community, and in line with studies which show that by working on eating, on stress and on physical activity, patients can significantly improve their odds in the fight against cancer.

Over time, the Chirec will provide Facilities of over 200 m2 beside the new Delta Hospital, in Auderghem. To begin with, the activities will take place at 329 rue Vanderkindere in Uccle, on premises provided by the Edith Cavell Clinic, as of October 2016.

This comprehensive support, centralized in a friendly atmosphere, is an invaluable asset for many patients. The centre focuses on improving their quality of life and that of their family circle during and after treatment.

Janik Nicodème-Goldberg
Project Manager, Re-source Center

Re-source Chirec Delta Center

In practical terms for 2016-2017:

- **When?** Activities will begin on 10 October 2016.
- **Where?** 329 Rue Vanderkindere, in Uccle
- **What?** The activities focus on 4 areas:

Being, Moving, Eating, Sharing.

1) Reception open from 10 am to 12 pm from Monday to Friday
2) Healthy breakfasts served on Thursday mornings from 8 am to 10 am
3) Creative, integrative medicine, art therapy and other workshops
4) Yoga, body exploration through movement, mindfulness, fitness Gym, self-defence, Tai Chi Chuan and other sessions
5) Nordic walking
6) Healthy cooking and sharing
7) Conferences

- **Need more details?**
www.re-source-delta.be
Tel: +32 479 0 345 92
jag@re-source-delta.be

- **Information & refreshments**
on 22 October 2016
at Chalet Robinson
From 2:30 pm to 4:30 pm.

MAKE A DONATION TO SUPPORT:

- CHIREC CANCER INSTITUTE'S CLINICAL RESEARCH: **Chirec Cancer Institute – CARE Foundation bank account:**
IBAN: BE88 3751 0478 5341 - BIC: BBRUBEBB

FONDATION care DC
CHIREC ACTION FOR RESEARCH & EXPERTISE
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The CARE Foundation was set up to promote high-quality scientific research in the different clinics belonging to the CHIREC. It supports the CCI's initiative for clinical research in cancer.
The CARE Foundation provides donors with tax deduction receipts, as of 40 euros donation/year.

The Foundation is a member of the "Réseau Belge de Fondations" (Belgian Foundation Network) and registered as a member of the AERF, Association pour une éthique dans les Récoltes de fonds (Belgian Association for Fundraising Ethics)

Contact us on: + 32 2 434 4662 - cancer.institute@chirec.be
Or at our postal address: Chirec Cancer Institute - CCI rue Edith Cavell, 32 - 1180 Brussels, Belgium

- FOR THE RE-SOURCE LAUNCH: **ING account:**
IBAN: BE 66 3631 6313 4943 - BIC: BBRUBEBB

Many thanks in advance for your generosity!

Chirec Cancer Institute

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