

Different specialists recommend different treatments. It is in the patient's best interests for them to reach agreement

The problematical prostate cancer

About 60 % of 60-year-old men have prostate cancer. In Norway, about 4 900 are diagnosed with the disease and about 1 000 men die of it each year. When the diagnosis is made, it is difficult to predict which tumours will develop into life-threatening disease. The result is over-treatment of so-called low-risk disease. Nonetheless, recurrence is seen in 11–38 % of those who undergo radical surgery and 33–67 % of those who receive primary radiotherapy (1).

The evidence base for prostate cancer contains a number of paradoxes and covers many specialised areas, and it is difficult to maintain an overview of the whole field of evidence. Diagnostics and treatment recommendations are totally dependent on the facts that are made the basis for decisions and the weighting they are given. A number of central issues have been intensely debated in *Tidsskriftet*: screening of prostate-specific antigen (PSA), overtreatment, side effects of radical treatment, the risk associated with hormone treatment and cryoablation therapy (2, 3).

Radical prostatectomy and external beam radiotherapy are regarded as the standard primary treatment methods (4). Brachytherapy is an alternative treatment and is administered by means of internal low or high dose-rate radiation. Low dose-rate is used for low-risk disease. High dose-rate is used in combination with external beam radiotherapy for high-risk disease. In the event of local recurrence after radical treatment, a further attempt can be made with a method other than that used the first time (salvage therapy).

The Norwegian Health Technology Assessment Centre has previously examined the evidence base for brachytherapy (5). The results of other types of radical treatment were also reviewed at the same time. One important piece of learning was that the results of treating low-risk prostate cancer were the same whichever method was used. The great majority of studies used a surrogate parameter, i.e. PSA, as an outcome measure, and not clinical parameters such as metastasis and survival. Today we know that the progression rate and survival are the same whether we administer radical treatment or merely observe. This is the reason why low-risk disease should not be treated (6). The Norwegian Knowledge Centre's report pointed out that specialists more frequently recommend the treatment that they themselves carry out, a situation that gives grounds for following conflicts of interest extra closely.

This edition of *Tidsskriftet* presents a review of the evidence base for using low dose-rate brachytherapy for low-risk prostate cancer (7). The authors, all of them oncologists, claim that the results of this treatment, which is not offered in Norway, is just as effective as prostatectomy. The authors are correct in claiming that low dose-rate brachytherapy has the same effect as prostatectomy on low-risk prostate cancer, but that is because none of the treatments are better than no treatment. It is a matter of concern that low dose-rate brachytherapy is recommended for patients who, according to new evidence, should not be treated at all.

If a systematic literature study of a treatment method for prostate cancer is to provide a valid and transparent evidence base, it is necessary to identify articles with a design that yields high quality evidence, uses agreed criteria for inclusion and follow-up and uses clinical outcome measures. This is unfortunately not the case for the study of Raabe et al., which is otherwise well written. Only two of the works reviewed have an evidence level of over 3. The authors duly report on Cochrane's criticism of Gilberti's work (8), but Zelefsky

et al. (9) also have serious weaknesses with respect to inclusion criteria and outcome measures. Low dose-rate brachytherapy is probably marketable in a private market, but in such case the treatment should be offered in a trial that has been approved by an ethics committee. If the treatment is to be given to younger men, the risk of radiation-induced secondary cancer should be discussed thoroughly.

However, a favourable side-effect profile is an argument for testing low dose-rate brachytherapy as a focal treatment option for patients for whom treatment is indicated, i.e. men with significant tumours that may affect their life expectancy. With focal treatment, the cancerous tumour in the prostate is killed, while the remainder of the gland is not treated, in the hopes of preserving continence and potency. Relevant focal treatments are cryoablation, high-intensity focused ultrasound, photodynamic therapy, NanoKnife and brachytherapy. The same methods are used as salvage therapy in the event of recurrence after radical radiotherapy. Cryoablation has the best evidence base, both as focal treatment and as salvage therapy after primary radiotherapy.

Critical selection and weighting of the evidence base is crucial for rating recommendations for treating prostate cancer. Competition among specialists may make it difficult to reach agreement on the optimal treatment for a given patient. Without a stringent, standardised meeting protocol, multidisciplinary team conferences serve little purpose. When finances, research resources and scientific merit are all involved, it is necessary to report not only financial, but also professional interests which may be in conflict with the patient's best interests.

Truls E. Bjerklund Johansen
tebj@medisin.uio.no

Truls E. Bjerklund Johansen (born 1951) Specialist in general surgery and urology, professor at the University of Oslo and senior consultant at the Urology Department, Oslo University Hospital. Dr Bjerklund Johansen holds a number of honorary positions with the European Association of Urology.

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