Cancer PAMP-immunotherapy

Patient information

PAMP-immunotherapy is a modern treatment based on the old fever therapy[1]. Its foundations are, among others

- Experiments in humans with fever induced by bacterial extracts between 1895 und 1936, which led to many spectacular healings[3] „which would be difficult to achieve today“[4],
- Experiments in cancer mice[2]
- First present day tests in humans[1,3,4].

Documentation can be found at http://www.fevertherapy.eu, the whole story in the book "Healing Heat" (amazon) including many references. Please note that both link and book may lag a tad behind the German versions www.pamp-therapie.de and "Heilende Hitze".

Governmental clinics

These clinics have physicians experienced in fever therapy and who are interested in PAMP-immunotherapy:

- Klinik Havelhöhe, Berlin
- Filderklinik Stuttgart
- Universitätsklinik Freiburg, Zentrum Naturheilkunde

Private clinics

In these private clinics PAMP-immunotherapy can be applied:

- Klinik-im-LEBEN, 07973 Greiz (Dr.Reuter)
- gisunt-Klinik, 26384 Wilhelmshaven (Dr.Wehner)
- Klinik Arlesheim near Basel, Schweiz (Dr.Orange)

General practitioners

We are working together with about 30 general physicians distributed all over Germany. Coordinates are supplied upon request from Uwe Hobohm at uwehob@pamp-therapie.de. In principle, any general practitioner can apply PAMP-immunotherapy. Physicians interested in cooperation should request the treatment protocol from Uwe Hobohm.

If you have found a physician close to your place, please request a personal counselling talk. Questions over phone or email often lead to misunderstandings.

Treatment

In many if not most cancer patients an immune reaction against cancer cells can be found, however, it is almost always too weak. PAMP can amplify a pre-existing immune response dramatically[3], but PAMP hardly induce a *de novo* immune response. So, the question is not which kind of cancer a patient has but whether there is a prior response. This cannot be checked easily before treatment.

In the old days, with fever therapy and bacterial extracts, for sarcoma a 5-year survival rate (and probably cure) of 80% has been demonstrated, and we have no reason to believe that PAMP-immunotherapy is less efficient. However, we do not have long-term observations yet.

PAMP act synergistically, i.e. several PAMP together induce a much stronger immune response. Therefore we use a combination of PAMP drugs.

Standard PAMP therapy requires one week to determine the patient specific treament dose and additional two to four weeks for treatment. We recommend a one-week booster treatment after half a year.

At present we recommend to combine 2-3 out of the following drugs: Iscador, Colibiogen, Strovac, Picibanil, flue vaccine, Mutaflor (oral). Common is the combination of Iscador, Colibiogen, Strovac. Doses are given in the treatment protocol for physicians. There is no need for additional treatment items.

Usually the patient enters the clinic in the morning with empty stomach and gets an infusion with 2-3 PAMP drugs over 30-120 minutes. Infusion can be preceded by a 30min hyperthermia to reduce common side effects such as nausea and headaches and to enhance fever ignition in those patients which cannot ignite fever easily.

Dose finding in the first week starts with a tiny dose on day one and subsequent higher doses the next days. If a dose is found which leads to a fever above 39°C and goes down below 38°C in the evening, this dose is used during treatment weeks. Slight dose adjustments during treatment may occur.

The innate immune system, where PAMP act, requires permanent stimulation similar to a proliferative pathogenic infection. Therefore therapy needs 2-3 applications per week, for instance on Monday, Wednesday, Friday. After infusion the patient should relax under physicians care. There are experienced patients who go home after infusion and take the fever under supervision of a relative.

First week treatment should be done in a stationary setting or with tight connection to a physician. Further treatment can be done in ambulant setting.

Adverse effects

Fever induced by PAMP drugs can be exhausting and have effects on the circulation such as alterations in blood pressure or dizzyness. Yet this fever is not dangerous since its cause is not an underlying infection. Fever declines automatically within one day down to normal.Treatment does not lead into long lasting damage like chemotherapy. In a retrospective phase-I study we could show that safety is excellent [5]. Over 523 infusions in 131 patients not a single severe adverse effect such as epilepsy, tumour lysis syndrome, circulatory collaps was observed. With preceding hyperthermia one quarter of patients experienced nausea or vomitting or headaches, about 12% showed back pain. More possible side effects are listed in the annex.

On the other hand patients may report a phase of pronounced mental and physical strength a few days after treatment.

If fever is felt to be too exhaustive, it is better to reduce dosage rather than introduce treatment gaps.

Uncompromised immune system

Optimal benefit from PAMP therapy can only be expected with an uncompromised immune system. Patients should not be pre-treated by chemotherapy (with the possible exception of gemcitabine) or radiation of large body parts, or pre-treatment should be at least 6 month (better 24 month) ago. Whether PAMP therapy can be beneficial in pre-treated patients is not predictable, adverse effects are much less predictable, fever kinetics can be erratic.

Immune suppressing drugs such as cortisone or opiates are not compatible with PAMP-immunotherapy, however, PAMP therapy can be envisaged briefly after cessation of cortisone or opiates. Prior or ongoing hormone therapy is theoretically compatible with PAMP-immunotherapy.

Course

Physicians experienced in fever therapy take the general feeling as a sign of treatment success. Does pain relief, does the patient have more energy or better appetite or subjectively feels better, do palpable nodes, perhaps after initial hardening (influx of T-cells), become softer. Some so-called cytokine markers such as TNF-α, IL-1, IL-1β,IL-6, IL-12, IF-γ should increase, others like IL-10 and TGF-β decrease. The so-called neutrophil-lymphocyte ratio should decrease under 3-4.

Financing by health insurances

Pure drug costs are comparably small, about 400-700€ for a 4-5 week treatement. In addition there are costs for stationary or ambulant stay. Private clinics charge about 300-350€ per day including drugs.

For refunding purposes arguments can be gathered from www.fevertherapy.eu.

I am patient - what can I do

Print this patient information sheet and take it for your first physicians visit. The physician, if untrained with PAMP-immunotherapy, should order, with name, address phone number, the physicians treatment protocol from uwe.hobohm@pamp-therapie.de. A second visit after the physician has carefully read and understood the treatment protocol may be advisable.

Please report problems or successes to Uwe Hobohm.

References

1 www.fevertherapy.eu/references Orange 2016
2 www.fevertherapy.eu/references Maletzki 2013
3 Heilende Hitze, amazon 2018
4 Mantovani et al. Nature 454(2008)436
5 Reuter, Öttmeier, Hobohm 2018

Annex: possible side effects

- Sub-cutaneous or intra-muscular application can lead to local skin irritations or signs of inflammation. Severity of skin irritations can be reduced by subsequent massaging the injection site. S.c. or i.m. application has the advantage of a depot-effect leading to slower but longer immune stimulation. Most manufacturers of mistletoe extract recommend s.c.-application.
- If fever exceeds 41°C, anti-pyretic measures and mild calf cooling can be considered. The next dosage should be reduced and / or delayed for 2-3 days.
- If infusion causes a body temperature decline beyond normal, similar dosage adjustment and / or pause are necessary. Decrease in temperature may be the result of an excessive dose or occur in debilitated patients or those with a weakened immune system.
- Strong adverse effects like nausea, vomiting, diarrhea should result in similar dosage adjustments. If fluid loss is severe, fluid should be replaced i.v. by 0.9% sodium chloride solution.
- In cases of other severe (grade 3 or 4) adverse symptoms fever therapy should be discontinued.
- PRRL therapy can lead to steep increase of tumour cells dying, in particular in tumours with good blood supply. On one hand this can be interpreted as a good sign of immune defence ignition. On the other hand kidneys can be overstretched by the load of cell debris, which can lead to tumour-lysis syndrome. Treatment should be abandoned until kidney lab markers stabilize.
- Pain in tumour lesions can be observed during the chill phase, often followed by a decline of pain below pre-injection levels.
- Sometimes the fevers lead to transient bone pain, which Vitamin-D3 and calcium/magnesium supplements help to reduce.
- During chills cutaneous vasoconstriction and cyanosis may be observed. Again, these can be alleviated by proper warming.
- Fatigue and sleepiness are common and expected.
- Excitability and irritability short after injection resolving after the chill phase are usual.
- Increased heart rate is commonly seen during chills.
- Myalgia, arthralgia and hyperesthesia are common.
- Dry mouth has been reported.
- Generally there tends to be a mild decrease in blood pressure during therapy. Hypertension or hypotension may occur shortly after injection in patients who are not adequately warmed. Faintness is seen after abrupt rising during chills.
- Anorexia, adipsia and weight loss occur often during fever and resolve once fever has declined. Patients often report increased appetite after one week of therapy.
- Photophobia may occasionally be noticed.
- Headache may occur.
- Impaired cognitive functioning is normal during high fevers.
- Menstruation disturbances have been reported.
- Accidental intravenous injection may lead to immediate rigors, shortness of breath, rapid heart rate, hyperventilation and / or nausea. Symptoms can be alleviated using diazepam. Fever may develop normally afterwards.
- Fever usually is followed by marked leucocytosis
- Seizures have not yet been observed under PAMP-immunotherapy.
- A circulatory collaps theoretically is possible when initial doses are given too high or too fast.
- Allergic reactions have not been observed under PAMP-immunotherapy.