



CONTENT

Spa Treatment	Physiotherapy – physiatrics
Local Natural Healing Resources	Hydrotherapy
Pattient admision	Thermotherapy
Specialized centres	Passive mechanotherapy
Specialized examination	Electrotherapy
Diet therapie	Phototherapy
Densitometry	Magnetotherapy
Drinkink treatment	Intestial & Cleansing procedures
Laboratory examination	Provable effects of spa treatment

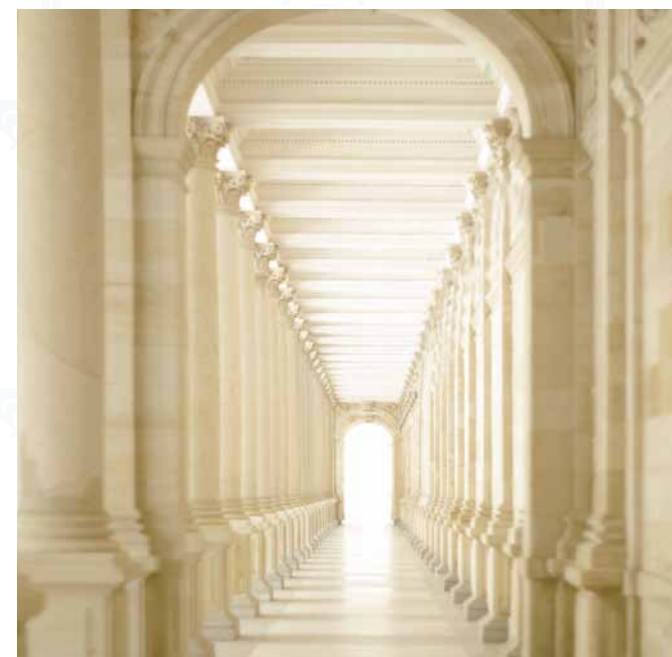
All links are active. Please, click on the selected button to move to required section.



Spa Treatment

in the Savoy Westend Karlovy Vary Spa Clinic

- ❖ We utilize natural healing resources – mineral springs
 - natural carbon dioxide
 - peloids and peat
- ❖ Professional medical care and diagnostics
- ❖ Traditional treatment methods, new balneological procedures and physical therapies, cutting-edge technical equipment
- ❖ Nutritional consulting



Local Natural Healing Resources

1/3

"Enjoy the healing touch of nature"

THERMAL MINERAL SPRINGS

Karlovy Vary and Western Bohemia, in general, abound with rare medicinal mineral springs which are rich in minerals and other efficient trace elements. Mineral water abstracted in the Karlovy Vary region is exceptional thanks to its chemical compositions and physical properties. The oldest components of this water are more than 25 000 years old. Gaseous carbon dioxide is a product of post-volcanic activities in the local region. Mineral water also contains a large amount of main, secondary and trace elements. While the basic chemical composition of all springs, whose temperature reaches up to 73.4°C, is nearly identical, every spring has a specific temperature, content of dissolved carbon dioxide, radioactivity and concentration of secondary and trace elements. In scientific terms, local mineral waters are characterized as thermal, hypotonic and strongly mineralized. The medicinal effect of these waters is attributed mainly to the high content of pharmacodynamically effective substances. Today, spa procedures; i.e. drinking cures and other internal or external balneological therapies use 14 springs that are recognized as natural healing resources and that rise from 21 spring vases.



Local Natural Healing Resources

2/3

“Enjoy the healing touch of nature”

CARBON DIOXIDE

Carbon dioxide was used for healing already in Ancient Rome. Thanks to its low reactivity carbon dioxide is nearly inert and highly soluble in water. It has antibacterial and fungistatic effects and thus it reduces the effects of bacteria and fungal molds. A carbon bath is one of the oldest spa procedures. It is applied in two ways: either as a traditional bath enriched with carbon dioxide, or as a so-called dry carbon bath. Even though their effects are almost identical, some clients find the ‘dry’ bath more appealing. The absorption of carbon dioxide makes blood vessels dilate and thus leads to better blood supply to tissues. Subsequently, the amount of oxygen in blood is increased and skin, muscles and body organs including the brain are better supplied with oxygenated blood. As a result, the immune system is energized and self-healing properties of the body are enhanced. Another positive effect of this procedure is reduction of blood pressure and pulse frequency. This is why carbon baths belong to our main procedures used to treat ischemic and cardiovascular diseases and to provide additional treatment to patients who suffered a heart attack.



Local Natural Healing Resources

3/3

“Enjoy the healing touch of nature”

PELOIDS – PEAT & THERAPEUTIC MUD

Peloids - peats or muds – are real gifts of Mother Nature. Depending on the site of occurrence, peloids feature different properties. However, their therapeutic effects are similar. The great advantage of all peloids is their ability to keep a stable temperature for a relatively long time. This is why they are used for procedures during which a stable temperature is required. The beneficial effects of peat for the human body have been known for centuries. Peat wraps and baths have excellent healing effects which have been proved by many generations. Peat consists of hundreds of dead plants and contains a large number of nutrients, minerals, natural trace elements and other substances. Peat is easily absorbed by skin. It helps skin regenerate, supplies it with nutrients, and improves its blood circulation. Peat has wonderful antibacterial and detox properties.

Besides therapeutic effects, peat has also great cosmetic qualities. Mud can be applied locally or as whole-body wraps. They help to reduce muscular tension, improve the nourishment of cartilage, connective tissues and intervertebral discs. Mud wraps are also beneficial during chronic inflammations, arthritis or vertebrogenic syndromes. They also positively affect the immune system, slows down the loss of elastin, collagen and hyaluronic acid. Highly convenient is the mixture of peloid and paraffin, which produces so-called parafango.

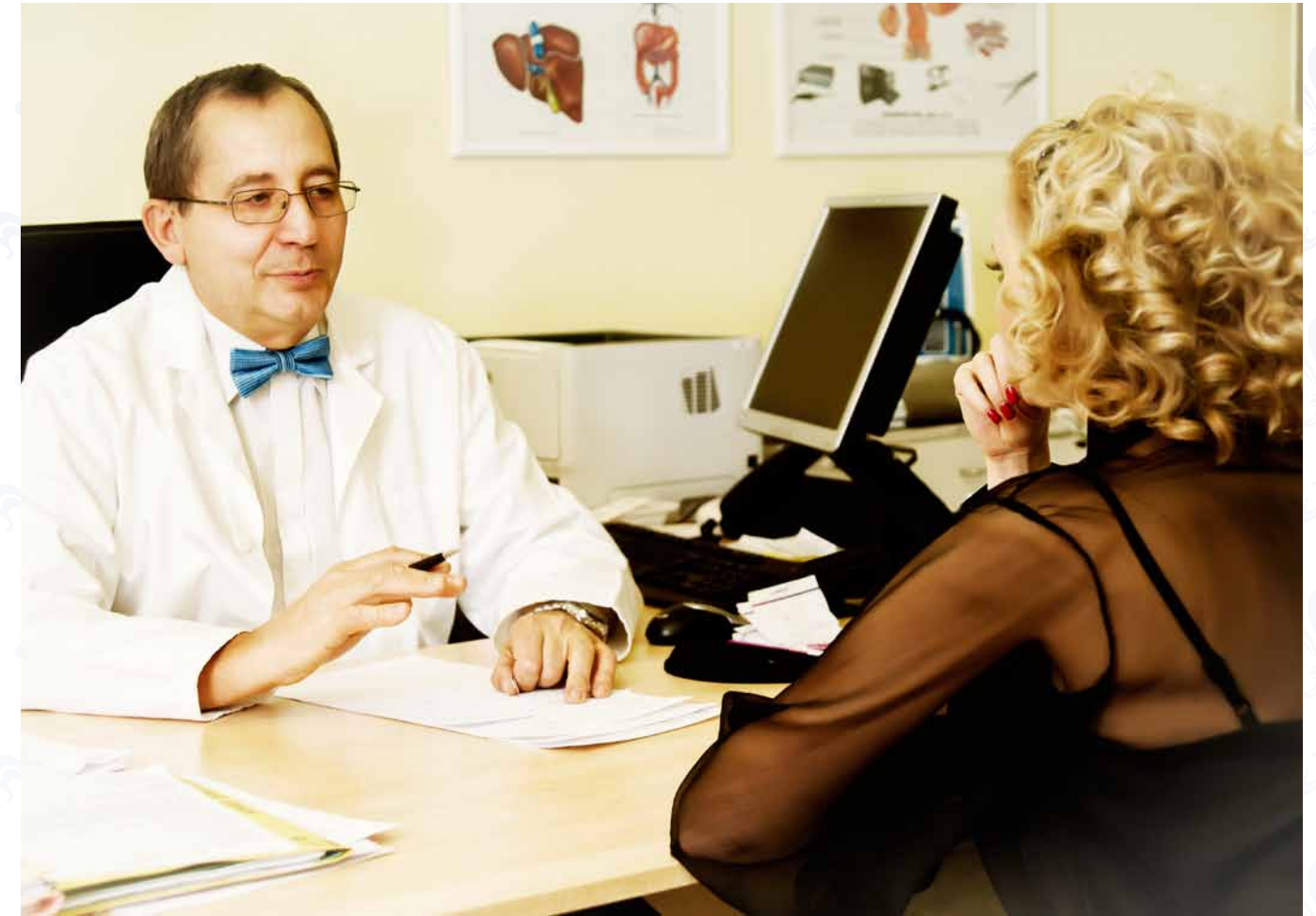


Patient admission

After a medical check the patient is referred to a nurse.

A nurse:

- ❖ Gives information about sampling – hands over the test tubes and provides instructions on their use
- ❖ Orders requested examinations at specialized centres, explains the preparation
- ❖ Measures ECG, orders the blood pressure monitoring examination and studying pauses in breathing during sleep – sleep apnea
- ❖ Carries out hygienic assistance in the patients' rooms as necessary
- ❖ Tests patients' pre-application sensitivity by a Gerovital injection
- ❖ Measuring blood pressure, body temperature, body weight, injection application, redressments, blood sugar measurement
- ❖ Delivers food from the canteen to recumbent patients and arranges dietology consultations
- ❖ Accompanies patients to specialized centres for examinations
- ❖ Continuously checks hotel first-aid boxes, refills them and monitors material expiration
- ❖ Continuously looks up medical records of previously admitted patients and Files medical records of patients who have left



Specialized centres

GASTROCENTE SPA III. (GASTROCENTRUM LÁZNĚ III.)

- gastroscopy
- sigmoidoscopy
- colonoscopy
- pediatrics
- anoscopy
- hemorrhoid surgery – painless
- capsule endoscopy

SPAMEDICON

- cardiology
- allergology
- mammology
- otolaryngology
- RTG
- endocrinology
- neurology
- liver steatosis or fibrosis examination – FIBROSCAN

LASERA

ear, nose and throat examination

ORTHOPEDIST

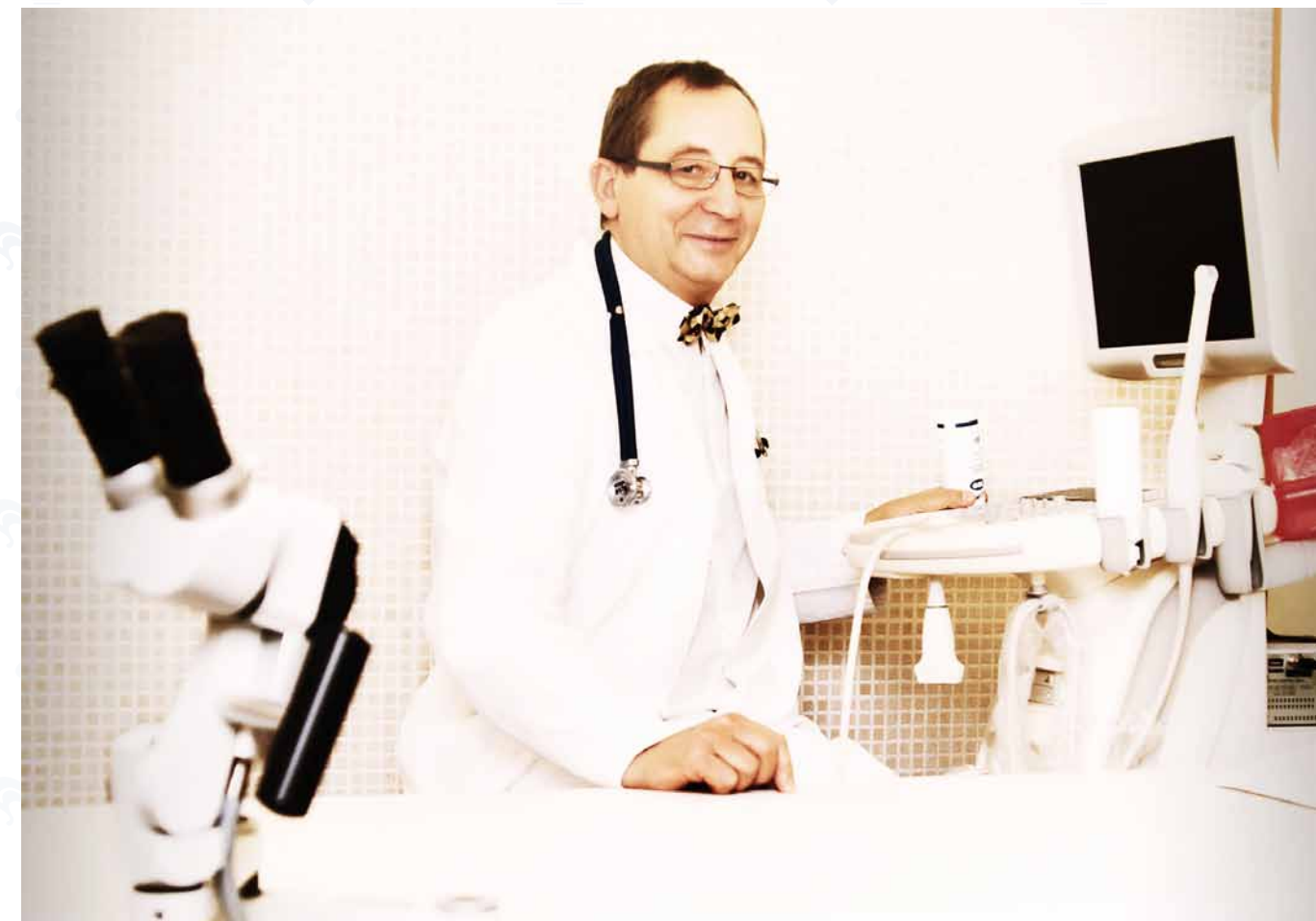
MUDr. Kaplan

OPHTHALMOLOGY

MUDr. Prokop

CARDIOLOGY

Head Physician MUDr. Pad'our – Hotel PUPP



Specialized examinations

executed at the Savoy Westend Karlovy Vary Spa Clinic

GYNAECOLOGY

UROLOGY

SONOGRAPHY OF

- abdominal cavity
- breasts and axillae
- carotid arteries
- thyroid gland
- kidneyss, bladder and prostate
- blood vessels of lower limbs

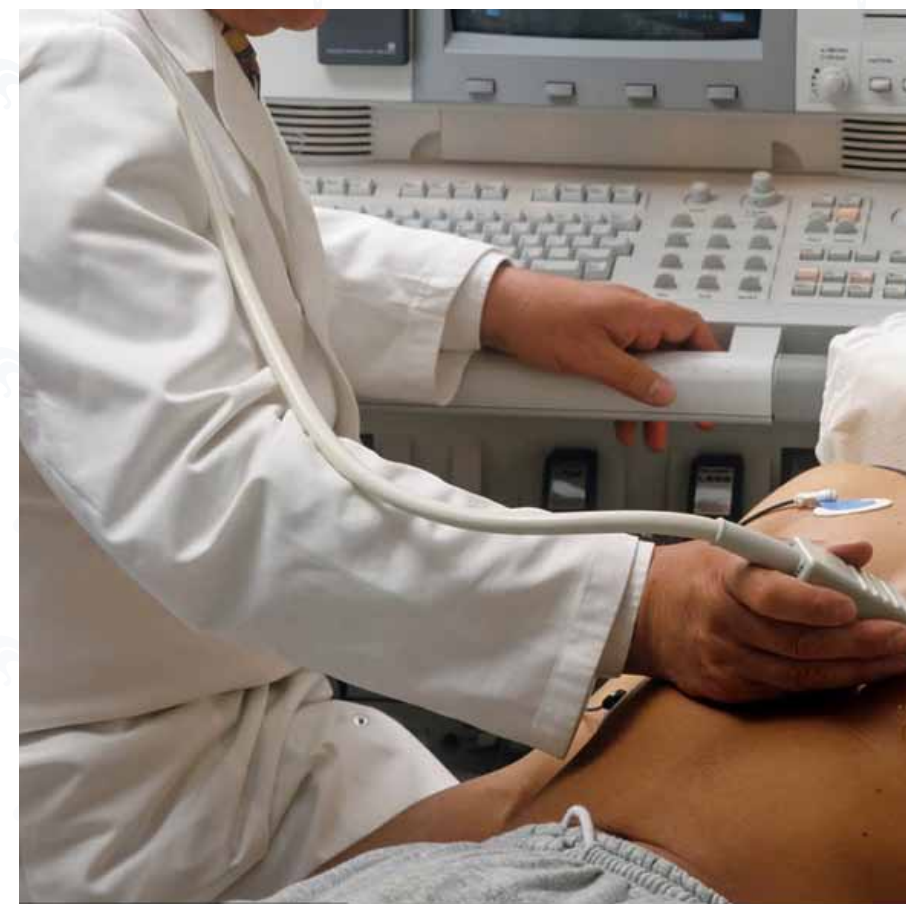
DERMATOLOGIST

Asklepion

NUTRITIONAL THERAPIST CONSULTATIONS – DIETOLOGY

BODYMONITORING

DENSITOMETRY



Diet therapy

1/3

BODYMONITORING

- ❖ Adults – the „TANITA“ body analyser is used to:
 - measure and weigh the child
 - measure body and visceral fat
 - body water
 - BMI
 - muscle mass
 - bone weight
 - metabolic age

Grafic image of the measured values and recommended range, the nutriniional therapist builds an individual diet plan based on the data.



[back to main menu](#)

Diet therapy

2/3

BODYMONITORING

- ❖ Adolescents (10–18 years of age) – the „TANITA“ body analyser is used to:
 - measure and weigh the child
 - BMI
 - measure body fat

Grafic image of the measured values and recommended range, the nutriniol therapist builds an individual diet plan based on the data.

Nutritional therapist consultation is a paid procedure, duration – 30 minutes.



Diet therapy

3/3

- ❖ Inappropriate eating habits alteration
- ❖ Diet system for spa establishments (11 main diets)
- ❖ Individual diets (elimination diets, reduction diets and combinations of diets)
 - Lowering the total energetic value
 - Lowering the ratio of animal fats and proteins, increasing the ratio of vegetable ones
 - Lowering the amount of sodium chloride
 - Increasing the amount of vitamin C, antioxidants
 - Substituting monosaccharides with artificial low-calorie sweeteners
 - Increasing intake of vitamins and trace elements



Densitometry

- ❖ determines density of bone tissue and amount of minerals in bone tissues
- ❖ carried out in patients with suspicion of osteoporosis
- ❖ it is a painless examination that does not burden the patient

[back to main menu](#)



Drinking treatment

1/2

The Carlsbad spa treatment is based on drinking treatment. Regular drinking of the Carlsbad mineral water has positive effects on the digestive tract, the level of fats and sugar in the blood, it decreases the uric acid. It has positive effect on the activity of the stomach, the intestines, gall bladder, liver and the pancreas. A suitable spring will be determined by the attending physician.



Drinking treatment –its effects

2/2

- ❖ warm hydrogen-carbonate-sulphate-chloride-sodium mineral water, pH 6.9, suitable Carlsbad hot spring salt
- ❖ effect: local on the gastrointestinal tract mucose, increasing digestive enzyme activity
- ❖ neutralising effect
- ❖ standardization of stomach, duodenum and intestine peristalsis, eutonizing and spasmolytic effect
- ❖ choloretic and cholekinetic effect
- ❖ stimulation of excreting pancreatic juice to the duodenum
- ❖ improving the utilization of glucose at the periphery
- ❖ body irrigation



Laboratory examination 1/3

- ❖ a specialized nurse takes patients' samples of blood, urine, sputum, stool, body cavity swabs and breath tests
- ❖ the sampling starts at 7 to 8.30 a.m.
 - the patients have to be on an empty stomach
- ❖ some samples are processed directly in our laboratory
- ❖ other samples are processed in the following specialized centres
 - Aeskulab (Pilsen)
 - Genetika (Carlsbad)
 - Faculty hospital (Pilsen)
 - Lab4More (Munich)
 - Sanglab (Carlsbad)



Laboratory examination 2/3

- ❖ some examinations require special preparation – the client's diet
 - Pancreatic lipase – butter (according to client's weight) and toast bread
 - Pancreatic amylase – milk and corn flakes
 - C peptide 1 hour after food – 100 g of bread and 1 packet of cottage cheese
 - Breath test – orange juice with the relevant agent
- ❖ the specific samples need to be adjusted by the centrifuge and poured into the required test tubes before sending them off
- ❖ the infusion therapy is also carried out in the laboratory



Laboratory examination 3/3

OUR LABORATORY PROCESSES:

- Blood count – gives an idea of the overall health
- Blood sedimentation – shows inflammatory and tumorous processes in the body
- Urine + sediment – urine examination
- CRP – C reactive protein differentiates a viral infection from a bacterial one
- HbA1C – shows average values of blood sugar in the past three weeks
- Haemocult – disguised haemorrhage of the large intestine – cancer prevention
- Blood sugar – immediate blood sugar level

GLYCEMIC SENSOR

- specialised monitoring of blood sugar for three to seven days



Physiotherapy – physiatrics

HYDROTHERAPY

THERMOTHERAPY

MECHANOTHERAPY

ELECTROTHERAPY

PHOTOTHERAPY

RADIOTHERAPY

MAGNETOTHERAPY

COMBINED THERAPY



Hydrotherapy

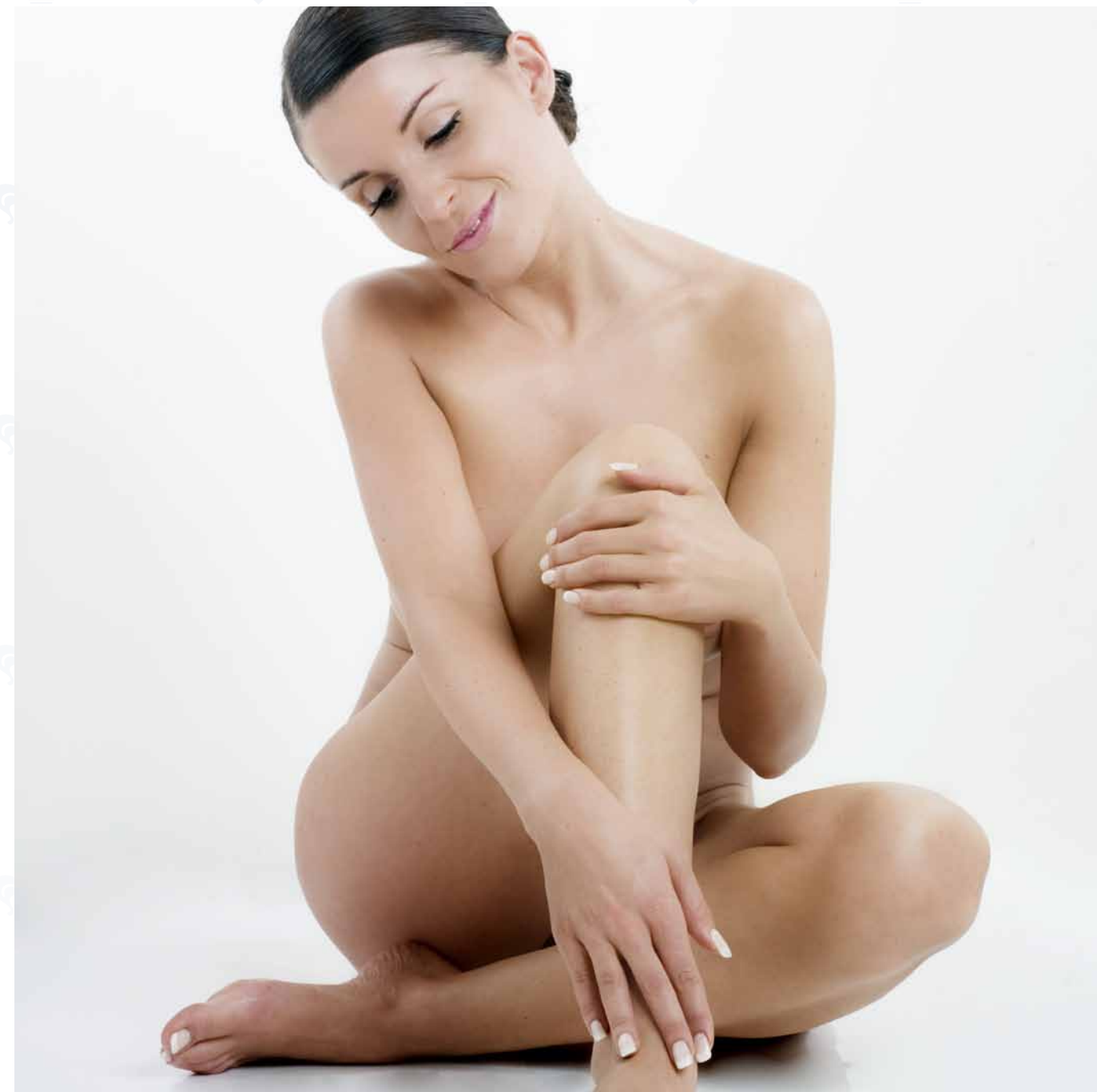
Applying water of different temperature and in different states for dietetical, prophylactic and therapeutic performance

- ❖ Baths in spring water with carbon dioxide, air, peat and herbs
- ❖ Scottish showers
- ❖ Underwater massage
- ❖ Kneipp's contrast hydrotherapy
- ❖ Whirlpool baths – partial and complex
- ❖ Aquaerobics



Thermotherapy

- ❖ **Positive** – vasomotoric, myorelaxing, spasmolytic, analgetic effect, paraffin and peat wraps, poultices, infra-red lamp
- ❖ **Indifferent**
- ❖ **Negative** – vasoconstriction, muscle tone changes, slowing down the pulses, improving metabolism, analgetic effect, decreasing swelling, cool poultices, Priessnitz poultices
- ❖ Partial, general, direct contact, contactless



Passive mechanotherapy

- ❖ Classic and segmental massage – reflective
- ❖ Passive manual therapy – manipulation, traction on traction table and water traction
- ❖ Passive gymnastics – manual and instrumental
- ❖ Passive movement water therapy
- ❖ Mechanical effects of pressure in water bath
- ❖ Instrumental mechanotherapy – utilizing pressure, positioning, traction, ultrasound



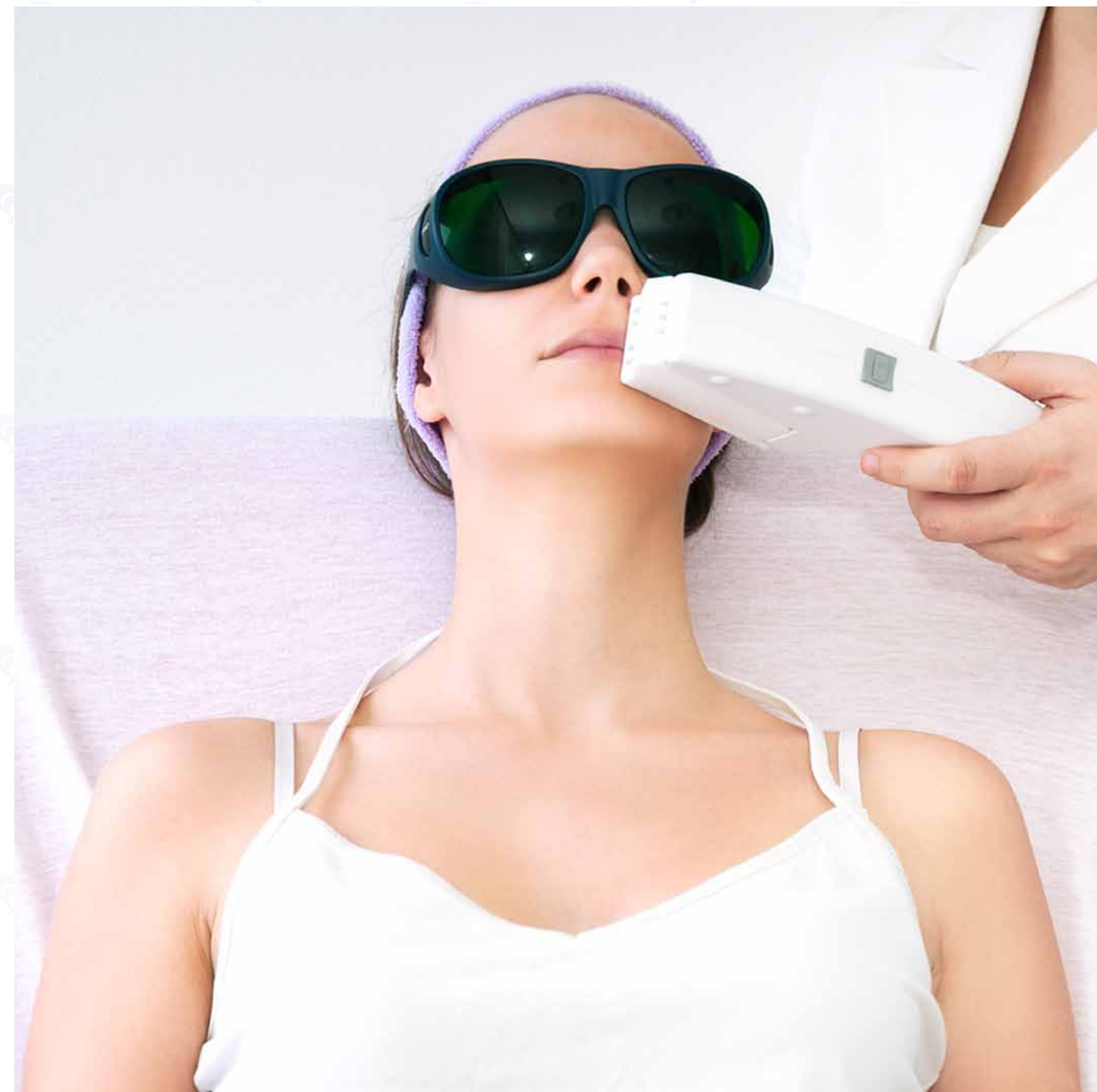
Electrotherapy

- ❖ Electroanalgesia – DD currents, interference currents, Träbert currents, TENS
- ❖ Galvanotherapy – direct galvanic current
- ❖ Impulse therapy
- ❖ Diathermy – high-frequency current
- ❖ Ultrasound – micro-massage with simultaneous warming-up



Phototherapy

- ❖ Treatment by electromagnetic radiation within the visible spectrum part, ultraviolet and infrared area, using the effects of photons
- ❖ Laser, so-called biolamps, use polarized light



Magnetotherapy

- ❖ Static magnetic field
 - around conductors and coils powered by direct current
- ❖ Alternating magnetic field
 - around conductors and coils powered by alternating current
- ❖ Pulse magnetic field
 - around conductors and coils powered by pulse current Magneto Stym



Intestinal procedures

1/2

[back to main menu](#)

CLEANSING PROCEDURES

- enema
- intestinal douche

TREATMENT PROCEDURES

- microenema
- rectal infusion
- intestinal bath

COMBINED EFFECT



Cleansing procedures

2/2

[back to main menu](#)

CLEANSING ENEMA

- ❖ hot spring water, 18-30°C, 600-1200 ml
- for acute constipation, rtg or endoscopic examination preparation

MINERAL WATER INTESTINAL DOUCHE

- ❖ 38-42°C, 2-6 l, 15-20 min.
- for spastic constipation and sector chronic constipation therapy

The mineral water intestinal douche is only possible after a prior intestinal examination – sigmoidoscopy!



Provable effects of spa treatment

1/6

„Jewel of Modern Spa Industry and Traditional Balneology“

If a doctor-prescribed therapeutic regimen, including an individual dietary plan, is strictly observed for at least 3 weeks, the following effects of our treatment are obviously proved.

❖ **Reduction of total cholesterol by up to 30%**

Marked reduction of cholesterol levels in overweight individuals and in people whose initial cholesterol levels were too high. Strict observance of medical principles and recommendations after arriving home helps to maintain the positive effects of reduced cholesterol for as long as one year.

❖ **Average reduction of blood uric acid by 25%**

This reduction of blood uric acid alleviates gout symptoms and promotes general well-being.

❖ **Reduction of insulin resistance in 85% clients with metabolic syndrome**

This reduction promotes better management of diabetes, mainly of type 2, especially in clients with the elevated secretion of their own yet less effective insulin.

❖ **Significant improvement of fatty-liver disease in 90% clients**

As early as 2 weeks after starting an intensive drinking cure based on the mineral waters of Karlovy Vary 90% of clients experience a significant improvement of steatosis, or fatty-liver disease. The respective parameters are measured during FIBROSCAN examination which facilitates unparalleled treatment of this condition.

❖ **Better joint mobility**

After two weeks of the intensive application of complex physical therapy joints become more mobile and the symptoms of the degenerative disorders of the locomotor system are alleviated.

❖ **Subjective improvement is reported by 90% clients with digestive tract diseases**

90% clients with functional dyspeptic conditions of the upper and lower gastrointestinal tract (heartburn, bloating, flatulence, diarrhea, constipation) experience improvement as early as 2 weeks after starting a complex spa treatment.

❖ **Up to 5% weight loss in seriously overweight clients**

Seriously overweight clients report 5% weight loss after 4 weeks of a complex spa treatment. If the regimen is observed after arriving home, weight tends to decrease even more.

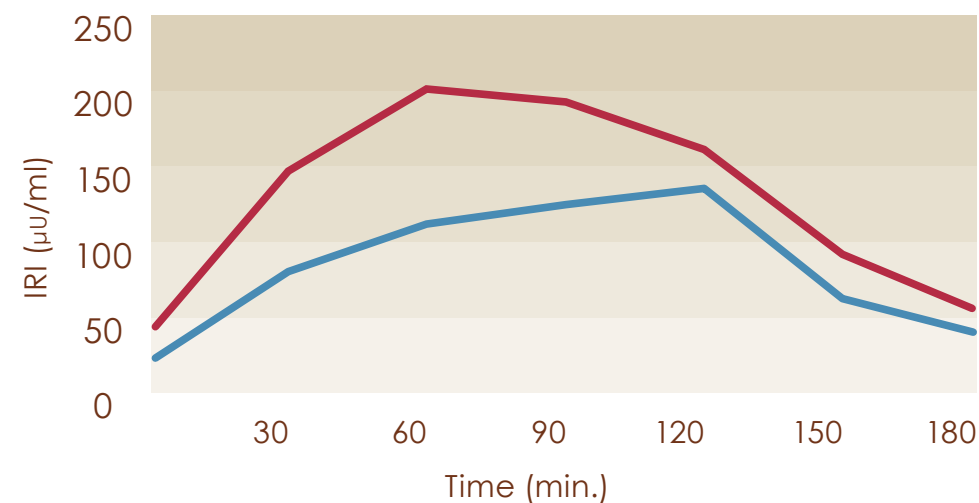


Provable effects of spa treatment

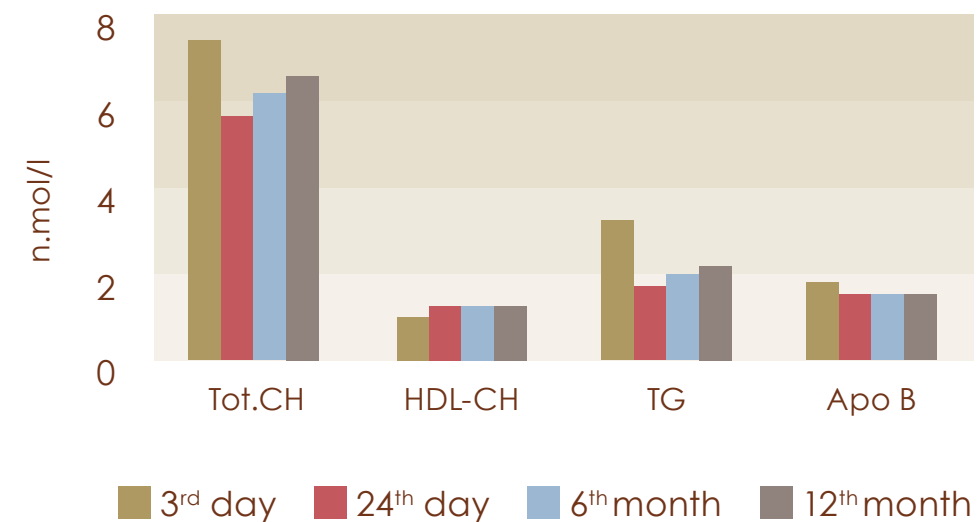
„Jewel of Modern Spa Industry and Traditional Balneology“

2/6

**The effect of 4-weeks complex spa trt
on the immunoreactive insulin curve (n=68)**



**Changes in lipid levels due
to spa treatment (n=24)**

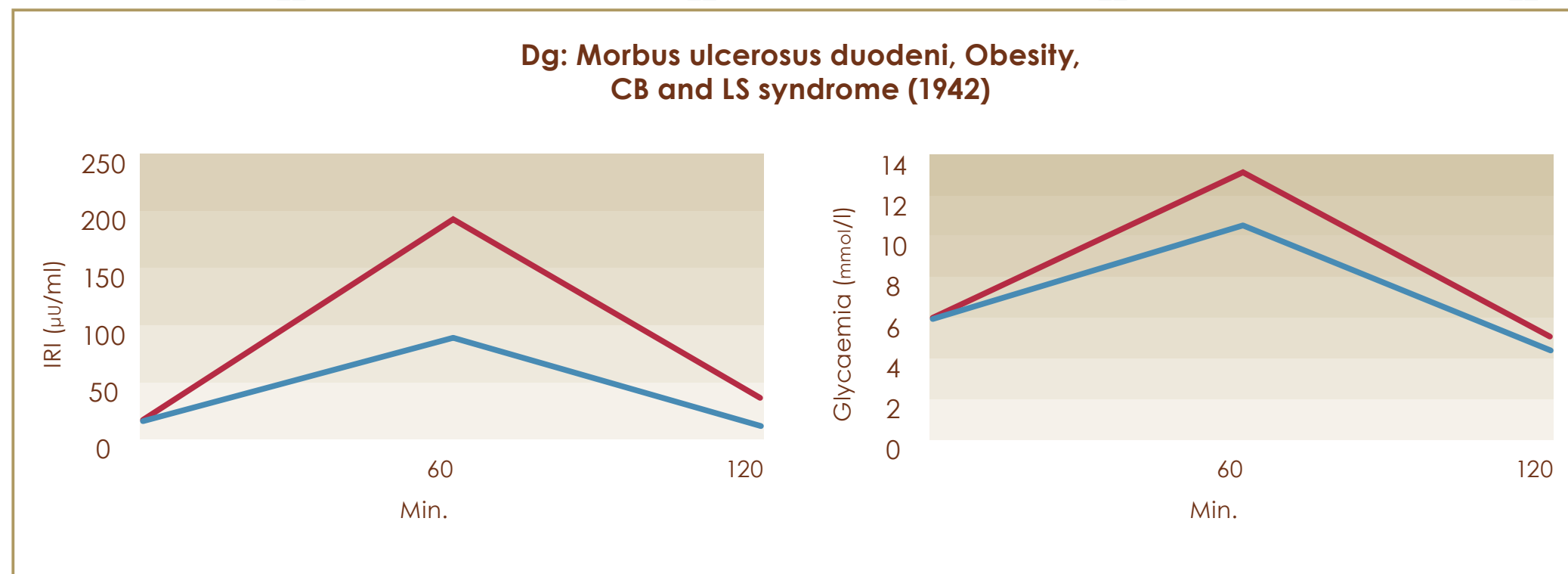




Provable effects of spa treatment

3/6

„Jewel of Modern Spa Industry and Traditional Balneology“

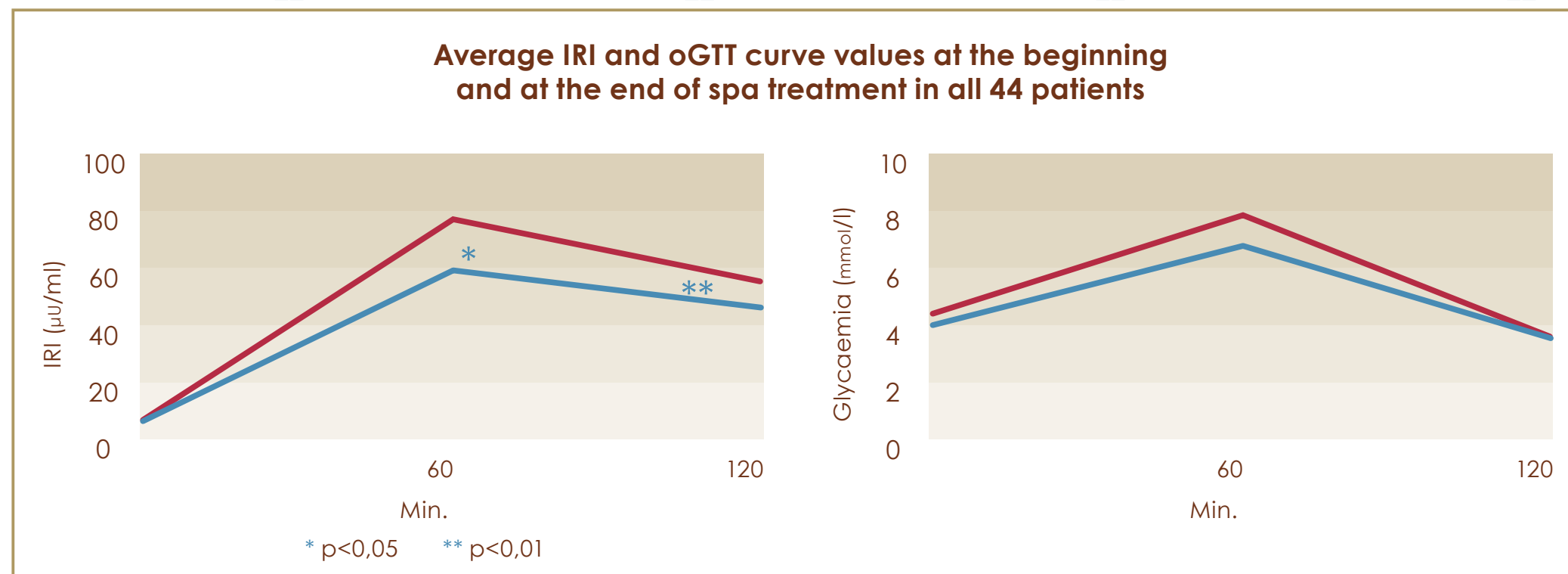




Provable effects of spa treatment

4/6

„Jewel of Modern Spa Industry and Traditional Balneology“

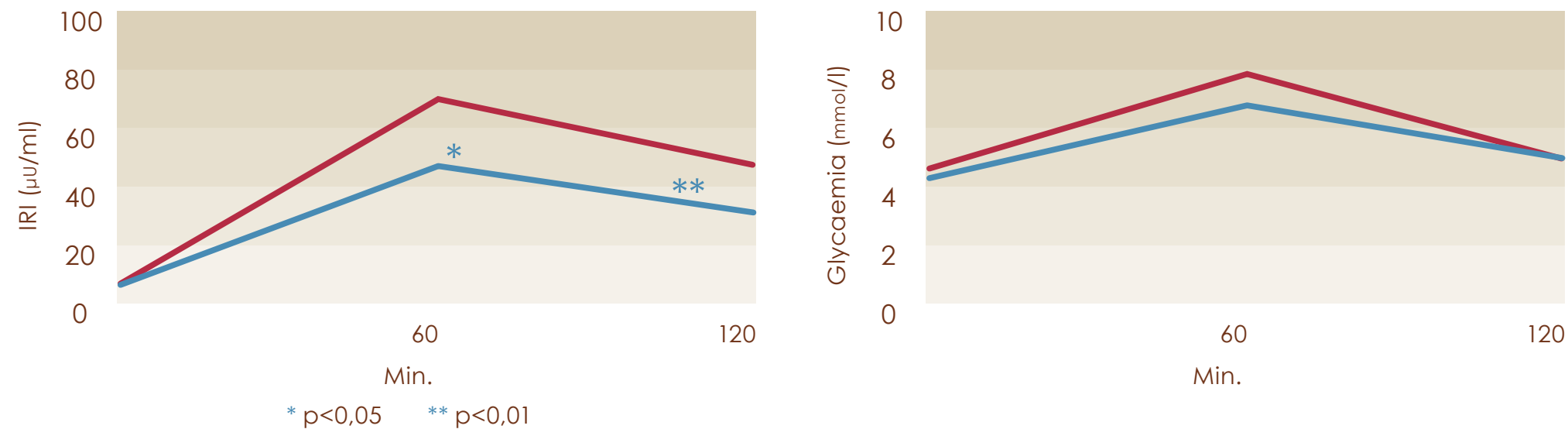


Provable effects of spa treatment

5/6

„Jewel of Modern Spa Industry and Traditional Balneology“

**Average IRI and oGTT curve values at the beginning
and at the end of spa treatment in all 23 patients who WERE NOT OBESE**





Provable effects of spa treatment

6/6

„Jewel of Modern Spa Industry and Traditional Balneology“

