

FONDAZIONE OSPEDALE GIUSEPPE ARAGONA ISTITUTO GERIATRICO E RIABILITATIVO - ONLUS

Viale Grasselli Barni 47, 26037 San Giovanni in Croce – Cremona Tel. 0375/310438 Fax 0375/310053 - C.F./P.I. 00296100191

www.ospedalearagona.org - direzionesanitaria@ospedalearagona.org direzionegenerale@pec.ospedalearagona.org direzionesanitaria@pec.ospedalearagona.org

Direttore laboratorio Dr. Gabriele Adinolfi laboratorio@ospedalearagona.org - 3349125049

INSTRUCTIONS FOR THE CORRECT COLLECTION OF BIOLOGICAL MATERIAL

.2
.2
.2
.3
.3
.4
.4
.4
.5
.5
.5
.6
.6
.6
.6
.6
.7
.8

VENOUS BLOOD SAMPLING

Before each blood test, the patient should:

- be fasting for 8-12 hours before the test
- refrain from changing their usual diet (except for preparation for some exams that require a specific diet)
- avoid strenuous physical exercise for 12 hours before the test
- not smoke from the time they wake up until sample is taken
- not drink alcohol for 12 hours before the test
- avoid, if possible and always with medical consent, taking drugs such as anxiolytics, antibiotics, antiflu, anti-inflammatories, analgesics or otherwise communicate the name of the drugs taken

It is recommended that the patient does not strain the arm for at least 30 minutes and abstains from intense sports activities involving the upper limbs for at least three hours after sampling.

Glycemic curve and insulinemic curve

The patient should:

- arrive at the Collection Point as soon as it opens (7.30 a.m.)
- be fasting for at least 8 hours

The patient should NOT change their diet on the 3 days prior to the test and should exercise as usual. After taking the baseline blood glucose sample and verifying the suitability for the test, the patient is given the dose of glucose solution required by the medical prescription or by the type of curve being tested, to be taken within 5 minutes.

For the time required by the type of curve being tested, the patient is invited not to leave the collection point and not to eat or drink.

URINE TEST

Complete urinalysis

The patient should collect urine for urinalysis and urine culture test at their home before going to the collection point; urine can be collected at the Collection Point only and exclusively in the event that the patient declares that he/she has not urinated for more than three hours.

A sample collected without following the above instructions may have a false negative result.

- Wash the external genitalia thoroughly. For complete urine testing, collect a sample of the first morning urine, letting the first catch of urine fall into the toilet.
- Use the sterile disposable screw-top containers
- Collect an amount of urine equal to the maximum level marked on the container and close it very tightly with the appropriate cap
- Label the sample container with your name, surname and date

We recommend waiting at least three days after the end of the menstrual cycle.

Deliver the biological sample as soon as possible.

Complete urinalysis to search for urinary antigens and urinary parasites

(First morning urine)

Collection should be performed at least one week after the end of any antimicrobial therapy.

Collection should not be performed during the menstrual period, if possible.

- wash your hands thoroughly;
- thoroughly clean the urethral orifice and the surrounding area;
- urinate in the sterile container to collect a small amount of urine (about 15/20 ml);
- close the container tightly.

To detect URINARY PARASITES, the urine collection should be performed in the middle of the morning and should be preceded by about twenty bends on the knees: this allows a better elimination of parasites, if any, from the bladder.

Deliver the biological sample as soon as possible.

24-hour urine collection

Collect all day and night urine as follows:

- start the 24-hour collection by completely emptying bladder and discarding 1st morning urine into the toilet. Record this time as the start time of the collection (e.g. 7:00 a.m.)
- collect all day and night urine in the container
- on the following morning, finish the collection with the urine emitted at the same time as the previous day (e.g. 7:00 a.m.) in the same container
- mix thoroughly, measure the total volume of urine collected and take a sample to the laboratory.

If it is not possible to measure the urine volume, take all the urine you have collected to the laboratory.

N.B.: Urine should be stored in a cool place away from light during the collection period

CULTURE EXAMINATION

Urine culture test (mid-stream)

Urine should be collected in a sterile disposable screw-top container.

In case of acute symptoms, the sample can be collected at any time; in all other cases (check-ups in pregnant women, post-therapy check-ups, etc.), in order to provide reliable data on the bacterial load, the **first morning sample** is the most valuable; otherwise, the sample of urine should be collected **at least three hours** after a previous urination.

Urine should be collected using the "mid-stream" technique, as follows:

- wash your hands thoroughly
- thoroughly clean your genitals with soap and warm water, and thoroughly rinse the genital area;
- women should keep the labia majora apart with one hand and men should keep the skin of the glans completely retracted during skin cleansing and sample collection procedure
- begin urinating in the toilet and stop
- resume urinating directly into the sterile container, avoiding touching the inside and rim. Do not overfill half of the container
- quickly close the container.

Take the sample to the Lab as soon as possible.

Any antibiotic treatment should be suspended at least one week prior to collection unless otherwise indicated by the healthcare.

Urine culture from adhesive plastic bag collection

To collect this urine sample, it is necessary to have a sterile adhesive plastic bag, which can be found in pharmacies; The procedure is as follows:

- wash your hands thoroughly with soap and water;
- wash the patient's pubic area and external genitals with soap and water, rinse thoroughly and dry with disposable paper towels;
- apply the sterile bag (available in pharmacies) to the genital area, covering the perineum and pubic area;
- leave the bag "in situ" for no more than 30 40 minutes, replace it if necessary and repeat the procedure;
- as soon as urination has occurred, remove the bag;
- seal the bag properly and place it upright in a sterile wide-mouth urine container;
- Do not pour the urine into another container.

Take the sample to the Lab as soon as possible.

Urine collection for urine culture analysis from bladder catheter

To collect this urine sample, it is necessary to have a sterile needle and syringe and sterile, widemouthed, transparent container with screw cap. The procedure is as follows:

- close the drainage tube with pliers or the appropriate clamp, under the connection with the bag and at the sampling point, for at least an hour;
- disinfect the section of the drainage tube prepared for sampling with 70% alcohol.
- with a sterile syringe, aspirate approximately 10 mL of urine and place it in the sterile container;
- never collect urine from the bag or disconnect the catheter.

Take the sample to the Lab as soon as possible.

Sputum

It is important that the sample is not made up of saliva alone; If this occurs, repeat the collection. For those people who find it difficult to collect sputum, it is advisable to consult a doctor about taking mucolytics or expectorants for two days prior to the test.

The procedure is as follows:

- collect the sample in the morning BEFORE YOU DRINK OR EAT anything, using a sterile, wide-mouth container;
- rinse your mouth well with water;
- perform a deep expectoration and collect the sputum directly into the sterile container.

Take the sample to the Lab as soon as possible.

Vaginal swab and vaginal-rectal swab

The patient:

- should abstain from sexual activity for 24 hours prior to the test;
- should have stopped any antibiotic or antifungal treatment for at least one week;
- should have stopped any hormonal, probiotic or other local therapy (creams, plugs, vaginal ovules, vaginal douching,..) for at least one week;
- should not have performed any vaginal irrigations for 24 hours prior to the test;

Test cannot be taken during the menstrual cycle (except in cases where acute symptoms make it essential to take the sample during this period as well).

STOOL EXAMINATION

Stool collection for stool test (complete test) and culture test

Soft stools, i.e. stools passed during the acute phase of the disease and before starting antibiotic therapy, offer the best quality material for microbiological research.

The evacuated feces must be collected in the appropriate container.

Any antibiotic therapy must be suspended for at least a week unless otherwise indicated by the healthcare professional; make sure that water or urine does not contaminate the feces during collection, so as not to compromise the microbiological result;

For a complete stool examination it is necessary to use a sterile container and collect any parts of mucus or blood. The sample should reach the laboratory as quickly as possible.

Search for intestinal parasites

It is advisable to take at least three stool samples on three different days, it being understood that, in the case of a medical prescription, the instructions of the healthcare professional must be followed. Considering that many substances and some drugs (vaseline oil, barium, bismuth, antibiotics, non-absorbable antimalarials and antidiarrheals) interfere with the detection of intestinal protozoa, it is strongly recommended to stop taking them at least a week before carrying out the test.

Stool samples must be collected in adequate quantity (one walnut) since smaller quantities of stool can make the test falsely negative; they must be sent to the laboratory in a carefully closed stool collection container with a screw cap and must arrive within a maximum of 48 hours from each collection. In case of late delivery, the sample can be stored at 5±3°C.

Stool collection for fecal occult blood test (FOBT)

Stool for occult blood testing should not be collected during or within three days of the menstrual period or if the patient has bleeding hemorrhoids.

The intake of alcohol or drugs (for example Aspirin) must be stopped at least 48 hours before carrying out the test.

The procedure is as follows:

• Collect a sufficient quantity of feces (1-2 ml or 1-2 g) in a clean container.

The best results are achieved if the test is performed within 6 hours of sample collection. Otherwise, the sample can be stored at 2° - 8° for up to a maximum of 3 days.

Tape test

The collection material (slide and transport container) must be collected at the Collection Point.

Sampling must necessarily be carried out upon awakening, before evacuating the intestine and before any hygienic maneuver.

The procedure is as follows:

- use transparent adhesive tape, placing the adhesive part on the perianal area and applying light pressure
- tear off the adhesive tape and lay it on the glass slide provided by the laboratory with the adhesive part facing down, avoiding creases
- identify the sample with the patient's name, surname and birth data
- 24 hours after the previous collection, repeat the operation two more times or as many times as necessary to collect the number of samples indicated by the doctor.

Deliver the sample as soon as possible.

E. vermicularis eggs are very infectious and can adhere to the skin; therefore, during all phases of sample collection and preparation, wear protective gloves and wash your hands thoroughly after the operation.

THREE-SAMPLE URINE CYTOLOGY TEST

Collect the urine using the wide-mouth containers provided by the Laboratory; the patient's name, surname and date of birth should be indelibly written on the containers.

It is mandatory to carry out the test on the second urine of the morning; it is advisable that the collection is done on samples from three consecutive days. The sample should be collected as follows:

- eliminate the first morning urine;
- drink about one liter of water or other non-alcoholic and non-carbonated beverage;
- after drinking, wait about two hours, going about your normal daily activities. While waiting, avoid sitting or lying for a long time;
- wash your genitals thoroughly;
- collect the second morning urine in the container provided by the Lab;
- repeat the procedure on three consecutive days;

At the end of the three-day collection, take the three specimens to the Lab. It is not necessary to refrigerate the samples, unless temperatures are being too high. Room temperature is recommended **Caution:**

The collection container contains a PRESERVATIVE; therefore, it should not be thrown away or dispersed in the environment.

Some substances that make up the preservative are toxic or flammable.

It is advisable to store closed containers at room temperature (15-25°C), away from heat sources and flames, not to ingest, avoid skin or eye contact and keep out of the reach of children. If eye contact occurs, wash thoroughly with water and a decongestant ophthalmic solution. In the case of ingestion, drink plenty of water, avoid emetics, milk or charcoal and consult a doctor bringing this leaflet for reference.

COLLECTION OF CERVICAL AND VAGINAL CELLS (PAP TEST)

The patient:

- should abstain from sexual activity for 48 hours prior to the test;
- should not have had any topical treatment (candles, ovules, creams..) or vaginal irrigations for 24 hours prior to the test and must have suspended any local therapies at least 3 days before carrying out the test.

The use of lubricant is absolutely not recommended as it interferes with sample preparation and reporting. The sample can be collected up to 5 days before the menstrual cycle and only 5 days after the end of the period.

With regard to pregnant patients, screening programs recommend performing pap smears within the first pregnancy trimester (12 weeks and 6 days), as there are no contraindications to any collection procedure when pregnant; however, testing can be postponed postpartum if the patient has already been tested in the previous three years.