GUIDELINE FOR HEALTHCARE PROFESSIONALS 醫護人員注意事項

COLLECTION OF BLOOD SAMPLES

Sample tubes: Citrate Blood (CitB), Clotted Blood (CB), Heparinized Blood (HB), EDTA, Fluoride Blood (FB).

Sample Filling Orders:

- 1 Blood Culture. Store a broth bottle at 37°C for about 30 minutes before use. 10ml of blood is taken from the patient by venipuncture using strict aseptic technique and sterile equipment. Disinfect the stopper of the bottle with alcohol before injecting the blood specimen.
- 2 Citrate Blood (CitB): For specimens in which other coagulation testing is ordered, such as an activated partial thromboplastin time (APTT), Prothrombin Time or fibrinogen level. Fill the blood to the graduation mark indicated on the bottle. It is recommended that the samples be sent for delivery within two hours after collection.
- 3 Clotted Blood (CB): Collect the blood according to the ordered test(s) / profile(s) "volume required".
- 4 Heparinized Blood (HB): For trace element specimen. Fill the blood to the graduation mark indicated on the bottle. Gently invert the tube(s) 4 - 6 times immediately following collection.
- 5 EDTA: Fill the blood to the graduation mark indicated on the bottle. Gently invert the tube(s) 4 6 times immediately following collection.
- 6 Fluoride bottle (FB): Fill the blood to the graduation mark indicated on the bottle. Gently invert the tube(s) 4 6 times immediately following collection.

COLLECTION OF BIOPSY

- Place tissue specimen in a sterile container and cover with 10% formalin solution.

COLLECTION OF CONJUNCTIVA, NASOPHARYNX AND THROAT SWAB SPECIMEN

- 1 Conjunctival swabs: Gently swab the lower conjunctiva with a sterile transport swab to collect mucous membrane cells. Place in suitable transport medium for testing.
- 2 Nasopharyngeal swabs: Insert a sterile transport, fine wire nasopharyngeal swab gently into one or both anterior nares to the posterior pharynx, rotate to collect mucous membrane cells and withdraw gently. Place in suitable transport medium for testing.
- 3 Nasal Aspirates: Have the patient sit with the head tilted slightly backward. Instill 1.5 ml of non bacteriostatic sterile saline (pH 7.0) into one nostril. Flush a plastic catheter or tubing (e.g. mucus trap tubing) with 2 3 ml of saline. Insert the tubing into the nostril parallel to the palate. Aspirate nasopharyngeal secretions. Repeat for the other nostril. Collect aspirates in sterile vial or mucus trap. Remove tubings and discard in plastic bag.
- 4 Nasopharyngeal & Oropharyngeal swabs: Use only sterile dacron or rayon swabs with plastic shafts. (Calcium alginate swabs, cotton swabs, or swabs with wooden sticks may inactivate some viruses or inhibit PCR testing).
 - Nasopharyngeal swab Insert swab into nostril to the palate and leave in place for a few seconds to absorb secretions. Swab both nostrils.
 - Oropharyngeal swab Swab both posterior pharynx and deep inside the throat (tonsillar crypts, inner walls, sides, etc.), avoiding tongue. Apply a little force, taking large numbers of mucosal cells, as the virus may be intracellular.

COLLECTION OF FEMALE ENDOCERVICAL SWAB AND HIGH VIRGINAL SWAB SPECIMEN

- Remove excess mucus from the endocervix with a large tipped cleaning swab.
- Insert the sterile transport swab into the endocervix or high vaginal area, rotate the swab for 15 - 30 seconds. The endocervical swab should avoid touching the vaginal walls.
- Insert the swab into the appropriate specimen transport tube, immerse the swab in the transport medium (in any). Secure cap or top of the swab.

FINE NEEDLE ASPIRATION (FNA) AND NON - GYN CYTOLOGY

- Spray smear immediately with Cytofix at about 7 inches (18cm) or soak in 95% alcohol for 30 minutes or overnight.
- After fixation, air dry 15 minutes before closing the cap of the slide container. Label the container.
 - * Exceptions: for fluid aspirates with sufficient quantity, pour fluid in 10 ml of 50% Ethanol/Saline (rinsing solution)

COLLECTION OF MALE URETHRAL SWAB SPECIMEN

- Instruct the patient not to urinate for 1 hour prior to sampling.
- Insert the small tipped specimen swab 2 to 4 cm into the urethra and rotate for 3 5 seconds to ensure adequate sampling. Use gentle, but sufficient pressure to ensure the swab comes in contact with urethral surfaces.
- Insert the swab into the appropriate specimen transport tube, immerse the swab in the transport medium (in any). Secure cap or top of the swab.

COLLECTION OF SEMINAL FLUID

- Patient should obtain a sterile urine container from clinic / laboratory.
- Do not use condom to collect the seminal fluid.
- In order to obtain accurate result, avoid seminal emission (discharge of semen) for at least 3 days.
- Write down the collection time on the container and send it to the laboratory within 2 hours.
- During transit to the laboratory, it is recommended to keep the specimen warm by keeping it close to the body in a coat pocket.

COLLECTION OF SPUTUM

- Collect sputum in the morning is preferred.
- Before collection, thoroughly rinse mouth with water to remove superficial flora.
- Instruct patient to cough deeply to produce a lower respiratory specimen. (Target specimen should not be colourless and watery.)

COLLECTION OF STOOL

- Cover the toilet bowl with plastic wrap, several pieces toilet paper or a wide mouth container to collect the stool specimen.
- Transfer ≤5g (approximately 1 tablespoon) of stool, especially those containing mucus, pus or blood, into the universal bottle.
- The excess stool can be discarded.

COLLECTION OF URINE

- 1 Early Morning Urine: Collect the first stream of morning urine.
- 2 MSU Mid Stream Urine:

For Male

- Instruct the patient to wash hands with soap before collection of specimen.
- Pull back the foreskin and pass a small amount of urine holding back the fold of skin. Pass the remaining urine in a sterile container this is mid stream urine (MSU).
- Place the cap, secure tightly.

For Female

- Instruct the patient to wash hands with soap before collection of specimen.
- Patient should undress in a suitable room, spread the labia and clean the vulva and labia thoroughly with warm soapy water.
- Rinse with warm water and dry.
- Pass urine, discarding the first part of the stream and collecting MSU in a sterile container.
- Place the cap, secure tightly.

In Infant and Young Children

- Ask the child to drink water or any other liquid.
- Clean the external genitalia and let the child be seated in the lap of the mother/nurse/attendant.
- Encourage the child to urinate and collect the same in sterile container.
- Cover the container tightly and rapidly transport to the laboratory for processing.

3 24 Hrs Urine:

- Please phone us for a 24 hours urine collection container, and inform us what tests are needed. Some tests required preservatives, which are often concentrated acid, and these cause burns. Treat with caution. Please inform patients of diet and drug restrictions for some tests (see Note).
- When collecting a 24 hours urine, it is often convenient to start first thing in the morning.
- The first morning specimen (e.g. 8:00am) should be discarded and all urine after that time should be collected in the container over a 24 hours period. At 8:00am the next morning, have the patient void again, and include this last sample in the collection container.
- The container may have corrosive strong acid inside. Recommend to use funnel to transfer urine sample to The collection container. DO NOT directly urinate into The container.
- As for all urine samples, the specimen should be refrigerated, (if possible) during collection, and until the time it is brought to the laboratory.
- Note: There are some alcohol, drug and diet restrictions for tests such as VMA, Catecholamine and Metanephrines. For queries please phone to us.
- 4. Chlamydia and Gonorrhea DNA
 - Instruct the patient not to urinate for 1 hours prior sampling.
 - The patient should collect the first 15 20 ml of voided urine (first part of stream) in a sterile urine container.
 - Refrigerate until pick up.

MAMMOGRAM

- Avoid any deodorant and powder prior to examination.

X - Ray / Contrast Studies / Computed Tomography / MRI

 Please ensure that the patient is not pregnancy during the examination, please consult our staff in case of any queries.

HYSTEROSALPINOGRAPHY

- Hysterosalpinography should be carried out within 10 days from the first day of the last menstrual period but Must not be during pregnancy or menstruation.
- Please inform our staff if you have Asthma, Diabetes Mellitus or other Allergies.

ULTRASOUND OF PELVIS / PROSTATE

- Drink a lot of water thirty minutes prior to examination until you have full bladder.

ULTRASOUND OF UPPER ABDOMEN

- Fasting for six hours prior to examination.

ULTRASOUND OF WHOLE ABDOMEN

- Fasting for four to six hours prior to examination.
- Drink a lot of water thirty minutes prior to examination until you have full bladder.

ALIMENTARY TRACT CONTRAST STUDY

- Barium Meal and Follow Through No eating and drinking for eight hours prior to examination.
- Barium Enema examination Special preparation is required for one day prior to examination, please contact our staff for details.

INTRAVENOUS UROGRAPHY

- Fasting for four to six hours prior to examination.
- Must empty bladder before examination.
- Please inform our staff if you have Asthma, Diabetes Mellitus or other Allergies.
 - * For diabetes patient requiring medication, please consult the referral clinician and inform our staff for the adjustment of insulin dosage and Metformin if necessary.

TREADMILL EXERCISE ECG

- Dress in casual clothing, preferably in sports wear and running shoes.
- Do not apply lotion, oil or powder to the chest area.
- Do not eat too much prior to the examination.
- Any regular medications please follow your doctor's dosage instruction before and after the examination.

COMPUTED TOMOGRAPHY

- CT scan is an X-ray imaging technique combined with advanced computer calculation and analysis. It provides high-resolution, three-dimensional images of various body organs. It is suitable for diagnosis of tumors, abscesses and for health check purposes.
 - Instruction for CT Scan
 - CT with IV contrast:
 - 1. Do not eat 4 hours before your exam. Continue drinking water as normal before your exam.
 - 2. Please inform our staff if you have asthma, diabetes mellitus or other allergies.
 - 3. Assess renal function and history of kidney disease if necessary.
 - 4. Patients with asthma / significant allergy history, such as seafood allergy or drug allergy are highly recommended to have steroid cover (40mg Oral Prednisolone at 12 hours and 2 hours prior to the examination) prescribed by referring doctor before the appointed examination day.
 - 5. Oral contrast (provided by our centre) may be required for certain examinations, please consult our staff in the centre if patients have any problems.
 - 6. If you have diabetes, please withhold Metformin/ Glucophage on the day before examination and 24 hours after injection of contrast. Please inform referring doctor for alternative diabetes control medication before the appointed examination.
 - Please remove all metal items including jewelry, dentures, and hairpins as they may affect CT scan images.
 - 8. Please inform our staff if there is any chance of pregnancy.

Special Preparations:

CT Abdomen

1. Drink 400ml water 30 minutes before the appointed examination time.

CT Whole Abdomen/ Pelvis

1. Drink 300ml water 60 minutes, 40 minutes and 20 minutes before the appointed examination time. (Total 900ml).

CT Coronary angiogram

- 1. No exercise, coffee, tea, Coke 12 hours before examination.
- 2. Inform referring doctor to prescribe beta blocker if heart rate>65bpm.

MAGNETIC RESONANCE IMAGING

Magnetic resonance imaging is an advanced scanning technology that makes use of magnetic field, radio waves and computer technology to produce precise images of human body. The magnetic resonance scanner produces a strong magnetic field and the protons are arranged in a straight line within our body. When our body receives the radio wave, the protons are rotated and generate a weak signal. Scanner's receiver detects this signal and it will be sent to computer for processing and produce images.

- Instruction for MRI Scan
 - 1. Please remove all metal items including jewelry, dentures, and hairpins. Avoid using any make-up. Please inform our staff if you have any tattoos or piercings.
 - 2. Please inform our staff if there is any chance of pregnancy.

If IV contrast is needed:

- 1. Do not eat 4 hours before your exam. Continue drinking water as normal before your exam.
- 2. Assess renal function and history of kidney disease if necessary.
- 3. Patients with contrast allergy or drug allergy are highly recommended to have steroid cover (40mg Oral Prednisolone at 12 hours and 2 hours prior to the examination) prescribed by referring doctor before the appointed examination day.

Special Preparations:

Cardiac MRI (Anatomy, Function &Viability, perfusion study).

- 1. No beta blockers, aminophylline and nitrates 24 hours prior to examination.
- 2. No caffeine such as tea, coffee, chocolate and Coke 24 hours prior toexamination.
- 3. Assess renal function and history of kidney disease.

Note:

- Please bring relevant films and report for reference.
- It is convenient for you to bring together with the urine or stool specimen on the examination day.
- Please call our Centre for enquiries on other special investigations.