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VALPROIC ACID (EPILIM)

Specimen required: **Serum (1 x SST) - Sample prior to next dose.**
 Department: Biochemistry
 Results: Therapeutic range: 350 – 700 umol/L
 Peak level: 1 - 4 hours after oral administration.
 Half life: 6 - 15 hours.

Note: (i) Valproate may potentiate the effect of ethosuximide and phenobarbitone.
 (ii) Valproate prolongs skin bleeding time.
 (iii) Valproate in high doses may cause ketonuria which may interfere with urine testing.
 (iv) Valproate competes with phenytoin for protein binding sites.
 (v) Please note time of collection and last dose.

VANCOMYCIN

Specimen required: **Serum (1 x SST) - Trough and peak levels.**
 Trough - collect immediately prior to next dose.
 Peak - collect 30 minutes post IV infusion or 60 minutes post IM injection.

Department: Referred test

Results: Therapeutic Range: Trough < 10 mg/L
 Peak 20 - 50 mg/L
 Half life: Adult 4 - 10 hours.
 Children 2 - 3 hours.

Interpretation: High trough levels may result in nephrotoxicity.

VANADIUM

Specimen required: **2 x Trace metal tube. Dedicated tubes**
 Department: Referred test

VARICELLA DIRECT DETECTION (PCR)

See VIRUS DETECTION

VARICELLA SEROLOGY (IGG & IGM ANTIBODIES)

Specimen required: **Serum (1 x SST)**

Note: A swab of an active lesion for PCR is the preferred method of diagnosis for acute Chicken Pox and Shingles

Department: Serology

Indications: Can be helpful for retrospective diagnosis
 Chickenpox - Fever and vesicular rash, common in children.
 Shingles - Painful circumscribed eruptions of vesicular lesions, mainly in adults.
 May be a severe or fatal disease in the immunosuppressed.
 Consider also Herpes simplex virus (viral culture or PCR of vesicular lesions).

Results: Reported as Positive or Negative with appropriate interpretive comments.

Note: **(i) Please telephone the Laboratory (Serology Dept) if URGENT immune status testing is required, e.g. pregnant and exposed.**
 (ii) Definitive testing when rash is present is a dry swab for PCR from vesicles/lesions.

VASOACTIVE INTESTINAL PEPTIDE (VIP)

Specimen required: **Can only be collected at main laboratory due to special collection requirements. Consult with Duty manager.**
 Patient needs to be fasting
EDTA tubes containing 0.2ml Traysol are required

Note: Collect blood and ensure blood in mixed well with Traysol. Place tubes in an ice bath and deliver immediately to SRA for centrifugation in chilled centrifuge or chilled centrifuge buckets. Separate and freeze ASAP after centrifugation.

Department: Referred test

VASOPRESSIN (ANTI DIURETIC HORMONE OR ADH)

See Anti Diuretic Hormone

VDRL

See SYPHILIS SEROLOGY

VENLAFAXINESpecimen required: **1 x Hep NO GEL tube**

Department: Referred test

VIRAL CULTURE

See VIRUS DETECTION

VIRAL LOAD FOR HIV

See HIV RNA

VIRAL STUDIES

Note: Specimens requesting "Viral Studies" CANNOT be processed. The Request Form must either indicate the viruses suspected, or must give good clinical details, so that the Microbiologist can advise on the appropriate investigations. Clinical details should include time of onset of illness, any travel, major manifestations, e.g. rash, myocarditis, encephalitis, paralysis, diarrhoea, pneumonia, pharyngitis.

VIRUS DETECTION (PCR AND CULTURE)

Specimen Required: **Skin swabs:**
If there are any blisters then the best results are obtained by de-roofing the blister and collecting the serous exudate as well as swabbing the base of the lesion (where the majority of virus laden cells reside). Viral skin infections may be diagnosed by PCR for HSV 1 & 2, Varicella, Orf and Molluscum contagiosum virus, hand, foot and mouth (enterovirus) etc.

Scabby Wounds:
Remove the scab and swab the base of the lesion.

Throat swabs:
Collect as a normal throat swab for viral PCR with a plain dry swab, no transport medium.

Upper Respiratory Tract Infection:
Nasopharyngeal swab or aspirate or throat swab for PCR

Intestinal Infection:
Faeces.

Meningitis, Encephalitis, Paralysis:
CSF, nose and throat swab and faeces.

Vesicular Rash:
Vesicle fluid or scrapings from the base of the lesion or onto dry swab.

Myocarditis, Pericarditis:
Faeces, and throat swabs.

Department: Referred test (except HSV Immunofluorescence performed at Clinipath Pathology)
We refer all our viral culture samples. Turn around time is now improved with the advent of routine rapid PCR techniques, at about 4-5 days - URGENT cultures e.g. in pregnancy can be processed in 24-48 hours.

Comment: PCR techniques have largely replaced Virus Culture. The correct sample for viral PCR of skin lesions, is a plain dry swab of the infected area. **DO NOT PLACE SWAB INTO AMIES TRANSPORT MEDIUM.** Replace swab into empty receptacle and transport as is. For respiratory viruses, a nasal swab or respiratory secretions eg Post Nasal Aspiration, in a sterile container is required.

See also: Herpes simplex type I / II rapid Direct Immunofluorescence.

VISCOSITY

See WHOLE BLOOD VISCOSITY

VITAMIN A

Specimen required: **Serum (1 x SST) - Protect sample from light, wrap in alfoil**

Note: Attach process immediately sticker

Department: Referred test

Reference range: As stated on report

VITAMIN B1 (THIAMINE)

Specimen required: (i) **Serum (1 x SST)**

(ii) **1 x EDTA or Heparin NO GEL for RBC Thiamine.**

Department: Referred test

Reference range: As stated on report.

Note: Antibiotics interfere with this assay. Collect 2 weeks after cessation of antibiotic therapy.

VITAMIN B2 (RIBOFLAVIN)

Specimen required: **1 x Heparin (NO GEL)**

Department: Referred test

Note: B2 is a precursor of FAD or FMN

VITAMIN B3 (NIACIN)

Sample required: **24 hour urine with acid preservative**

Department: Referred test

VITAMIN B6 (PYRIDOXAL)

Specimen required: **Serum (1 x SST)**

Department: Referred test

Reference range: As stated on report.

Varying with age and sex. These factors should be included with request.

VITAMIN B12 (CYANOCOBALAMIN) +/- FOLATE SEE NOTE

Specimen required: **Serum (1 x SST)**

Department: Biochemistry

Reference range: NORMAL 139 – 651 pmol/L

INDETERMINATE 74 – 138 pmol/L

DEFICIENT < 74 pmol/L

NOTE: If requested with **Folate** an EDTA must be collected as well.

All specimens with B12 results below 200 pmol/L will be tested for Active B12 (Holotranscobalamin)

VITAMIN C (ASCORBIC ACID)

Specimen required: **1 x EDTA Protect sample from light, wrap in alfoil**

Note: Attach process immediately sticker, must be processed within 1 hour of collection

Department: Referred test

Reference range: As stated on report.

Note: **Specimen can only be collected at Main Laboratory and Bicton ACC** due to the labile nature of Vitamin C. The specimen needs to be stabilised with a special solution immediately upon collection. The specimen is then frozen and wrapped in alfoil to protect it from light.

VITAMIN D (25-OH CHOLECALCIFEROL)

Specimen required: 1 x dedicated small SST
Department: Referred test
Reference range: 40 - 150
LOW – Osteoporosis
Comment: Levels between 40 – 60 may be associated with deficiency and compensating increased PTH.

VITAMIN D3

See Vitamin D

VITAMIN E (TOCOPHEROL)

Specimen required: **Serum (1 x SST) - Protect sample from light, wrap in alfoil**
Note: Attach process immediately sticker
Department: Referred test
Reference range: As stated on report.

VMA (VANILLYLMANDELIC ACID)

See ADRENALINE/ NORADRENALINE.
NOTE: Specific Catecholamines now performed.

VON WILLEBRAND'S FACTOR TESTING

Specimen required: **2 x Sodium citrate tubes. Bunbury Pathology to collect 3 x Na Citrate tubes.**
Department: Haematology
Comment: Consists of:
(i) APTT
(ii) Factor VIII (F8)
(iii) Von Willebrand's Factor (VWF)
(iv) Ristocetin Cofactor (Ricof)
