Patient Name: SHANN, DIANNE

Patient Address: 491 OLD GUNNEDAH ROAD, NARRABRI NSW 2390

D.O.B: 7/04/1952

Medicare No.: 4073625079

Leb Reference: 4073625079

IHI No.:

Lab. Reference:

Addressee: DR OKWIN OJAH

Porovider: YourNameHere

Referred by: Dr Okwun OJAH

Date Requested: 17/05/2024
Date Collected: 22/05/2024

Complete: 22/05/2024

Specimen:

Subject(Test Name): US Hand - Left Clinical Information:

Patient ID: 107.930913

Dr Okwun OJAH Order: 107.6808469 1

22 May 2024
Dr Okwun OJAH
NAMOI MEDICAL SERVICES
Suite 4, 159 Maitland Street
NARRABRI 2390

Patient ID:107.930913
Order: 107.6808469
Go Sonics - Narrabri
Ref: CB

namoims@promedicus.net

cc: GO SONICS ULTRASOUND

Re: Ms Dianne SHANN - DOB: 07/04/1952

491 Old Gunnedah Road NARRABRI 2390

# ULTRASOUND LEFT WRIST

Clinical History: She has had discomfort in her left wrist and middle finger. States that she has also felt some discomfort in her left thumb. ? carpal tunnel syndrome.

Findings: The dorsal aspect of the left wrist shows evidence of osteoarthritis with synovitis. Compartments 1, 2, 3, 4, 5 and 6 define normally.

On the volar aspect of the wrist there is a tendinitis of the flexor pollicis longus.

There is a tendinitis present of the flexor digitorum longus.

The median nerve is at the upper limits of normal.

The ulnar nerve defines normally.

No ganglion visualised.

Conclusion: Synovitis of the left wrist and evidence of OA. Tendinitis of the flexor pollicis longus and flexor digitorum longus.

Thank you for your referral.

Kind regards,

DR LOURENS BESTER MB. Ch.B. FRANZCR

Electronically signed by Dr Lourens Bester at 3:42 PM Thu, 23 May 2024

Patient Address: PO BOX 665 491 OLD GUNNEDAH RD, NARRABRI 2390

D.O.B: 7/04/1952 Sex at Birth: F

Medicare No.: 4073625079 IHI No.:

Lab. Reference: 24-26780277-GLU-0

Addressee: DR OKWUN OJAH

Provider: Laverty Pathology
Referred by: DR. OKWUN OJAH

Date Collected: 22/05/2024 Complete: Final Specimen:

Subject(Test Name): GLUCOSE (GLU-0)

Clinical Information:

Clinical Notes : She has had generalised malaise, her iron profile..

SERUM/PLASMA GLUCOSE Request Number 21278438 25952289 26780277 Date Collected 14 Oct 22 29 Feb 24 22 May 24 Time Collected 00:00 08:06 00:00 Fasting status Random Fasting Fasting Serum (3.4-5.4) mmol/L 4.3 5.3

Equivocally elevated fasting glucose result. If not recently performed, recommend follow-up assessment with an oral glucose tolerance test or HbAlc.

Requested Tests : VBF\*, TFT\*, GLU, HGA\*, MBA\*, INS\*, FE\*, FBE\*, A1C\*

SHANN, DIANNE DIANNE Patient Name:

Patient Address: PO BOX 665 491 OLD GUNNEDAH RD, NARRABRI 2390

**D.O.B:** 7/04/1952 Sex at Birth: F Medicare No.: 4073625079

**Lab. Reference:** 24-26780277-VBF-0 Provider: Laverty Pathology Addressee: DR OKWUN OJAH Referred by: DR. OKWUN OJAH

IHI No.:

**Date Requested:** 17/05/2024 Date Performed: 22/05/2024 Date Collected: 22/05/2024 Complete: Final

Specimen:

Subject(Test Name): B12, FOLATE, R.C.FOLATE (VBF-0)

Clinical Information:

Clinical Notes : She has had generalised malaise, her iron profile..

Request Nu Date Collec Time Collec	mber ted 16	B12 AND FO 21681216 Feb 23 29 09:44	25952289	26780277
B12	(156-740)pmol/L	386	429	428
Serum Fola	te (> 9.0)nmol/L		53.1	> 54.0

#### Folate Interpretation:

		DEFICIENCY	BORDERLINE	SUFFICIENCY
Serum Folate:   <4.5 nmol/L   4.5 - 9.0 nmol/L   >9.0 nmol/	Serum Folate:	ate:   <4.5 nmol/I	4.5 - 9.0 nmol/L	>9.0 nmol/L

### Serum Folate Assay:

In the absence of recent oral intake, a serum folate >9.0 nmol/L effectively rules out folate deficiency.

Red cell folates (RCF) are no longer processed routinely. If you have requested a RCF, and require a result for appropriate clinical reasons, this will need to be discussed and agreed with a Consultant Haematologist on +61290027085 or Dr. Lucinda Wallman, Consultant Pathologist in Immunology and Medical Director on telephone number +61 290057179

Requested Tests : VBF, TFT, GLU, HGA\*, MBA\*, INS\*, FE\*, FBE\*, A1C\*

Patient Address: PO BOX 665 491 OLD GUNNEDAH RD, NARRABRI 2390

D.O.B: 7/04/1952

Medicare No.: 4073625079

Lab. Reference: 24-26780277-TFT-0

Provider: Identify 2570

Sex at Birth: F

HII No.:

Provider: Identify 2570

Addressee: 24-26780277-TFT-0 Provider: Laverty Pathology
Referred by: DR. OKWUN OJAH

Date Requested:17/05/2024Date Performed:22/05/2024Date Collected:22/05/2024Complete:Final

Specimen:

Subject(Test Name): THYROID FUNCTION TEST (TFT-0)

Clinical Information:

Clinical Notes : She has had generalised malaise, her iron profile..

THYROID PROFILE Request Number 21278438 24481535 25952289 26780277 14 Oct 22 19 Jul 23 29 Feb 24 22 May 24 Date Collected Time Collected 00:00 11:27 08:06 00:00 Specimen Type: Serum TSH (0.5-4.0) mIU/L 2.4 2.0 3.2 2.6 FT4 (10-20)pmol/L 13

Result(s) consistent with euthyroidism.

Requested Tests : VBF, TFT, GLU, HGA\*, MBA\*, INS\*, FE\*, FBE\*, A1C\*

Patient Address: PO BOX 665 491 OLD GUNNEDAH RD, NARRABRI 2390

D.O.B: 7/04/1952

Medicare No.: 4073625079

Lab. Reference: 24-26780277-FBE-0

Provider: I-1

Addressee: 24-26780277-FBE-0 Provider: Laverty Pathology
Referred by: DR. OKWUN OJAH

**Date Requested:** 17/05/2024 **Date Collected:** 22/05/2024

Specimen:

Subject(Test Name): HAEMATOLOGY (FBE-0)

Clinical Information:

Clinical Notes : She has had generalised malaise, her iron profile..

		HAEMAT	OLOGY		
Request Number	216	81216	24481535	25952289	26780277
Date Collected	16 F	'eb 23	19 Jul 23	29 Feb 24	22 May 24
Time Collected		09:44	11:27	08:06	00:00
Specimen Type: ED	ATC				50.00
	ſ/L	145	144	147	151
Hct (0.34-0.47)		0.45	0.43	0.43	0.45
RCC (3.9-5.8)	x10^12 /L	4.7	4.7	4.7	4.8
MCV (79-99)	fL	95	93	92	94
	pg	31	31	31	32
MCHC (320-360)	g/L	322	332	339	334
RDW (10.0-17.0)	9	13.1	12.5	13.0	12.7
					12.7
WBC $(4.0-11.0)$ x	:10^9 /L	7.9	9.8	8.1	7.8
Neut (2.0-7.5)	x10^9 /L	4.8	5.9	4.9	4.0
	x10^9 /L	2.3	2.7	2.3	2.9
Mono (0.2-1.0)	x10^9 /L	0.6	1.0	0.7	0.7
Eos $(< 0.7)$	x10^9 /L	0.1	0.1	0.2	0.2
Baso (< 0.2)	x10^9 /L	0.1	0.1	0.1	0.1
				0.1	0.1
Plat (150-400) x	10^9 /L	372	388	359	351

HAEMATOLOGY: FBC parameters are within reference range.

Requested Tests : VBF, TFT, GLU, HGA\*, MBA\*, INS\*, FE\*, FBE, A1C\*

Patient Address: PO BOX 665 491 OLD GUNNEDAH RD, NARRABRI 2390

D.O.B: 7/04/1952 Sex at Birth: F
Medicare No.: 4073625079 IHI No.:
Lab. Reference: 24-26780277-MBA-0 Provider: Let

Addressee: 24-26780277-MBA-0 Provider: Laverty Pathology
Referred by: DR. OKWUN OJAH

Date Requested: 17/05/2024
Date Collected: 22/05/2024
Date Complete: Final

Specimen:

Subject(Test Name): SERUM CHEMISTRY (MBA-0)

Clinical Information:

Clinical Notes : She has had generalised malaise, her iron profile..

	SERUM CHEMIS	STRY		
Request Number	21278438	24481535	25952289	26780277
Date Collected	14 Oct 22 19			May 24
Time Collected	00:00	11:27	08:06	00:00
Specimen Type: Serum				
Haemolysis	Nil	Nil	Nil	1+
Icterus	Nil	Nil	Nil	Nil
Lipaemia	Nil	Nil	Nil	Nil
Na (135-145) mmol/L	139	138	138	137
K = (3.6-5.4)  mmol/L	4.4	4.6	4.9	4.9
Cl $(95-110)$ mmol/L	99	98	99	101
HCO3 (22-32) mmol/L	24	26	24	23
An Gap $(10-20)$ mmol/		19	20	18
Urea (3.0-10.0) mmol/L	6.6	7.7	8.6	8.3
Creat (45-90) umol/L	80	80	75	85
eGFR mL/min/1.73sqM	67	62	67	59
Urate $(0.14-0.36)$ mmol/L	0.44		0.47	
Bili $(< 15)$ umol/L	14	12	19	12
AST (< 35) U/L	20	19	25	37
ALT (< 30) U/L	20	20	24	31
GGT (< 35) U/L	17	24	27	29
Alk Phos(30-115) U/L	81	70	78	77
Protein (60-82) g/L	72	72	72	73
Albumin (36-48) g/L	45	43	44	44
Glob $(20-39)$ g/L	27	29	28	29
Ca $(2.10-2.60)$ mmol/L	2.43	2.40	2.40	
Corr Ca (2.10-2.60)	2.39	2.40	2.38	
PO4 $(0.75-1.50)$ mmol/L	1.23	1.33	1.24	
CPK (< 211) U/L	53			
Mg $(0.70-1.10)$ mmol/L		0.77	0.81	

eGFR 30-59 mL/min/1.73m2 suggests moderate chronic kidney disease and indicates the need for further investigation including assessment of proteinuria and cardiovascular risk factors.

As a result of haemolysis in this sample, the following analytes may be falsely elevated:  $\ensuremath{\mathsf{AST}}$ 

Requested Tests: VBF, TFT, GLU, HGA\*, MBA, INS\*, FE\*, FBE, A1C\*

Patient Address: PO BOX 665 491 OLD GUNNEDAH RD, NARRABRI 2390

**D.O.B:** 7/04/1952 Sex at Birth: F Medicare No.: 4073625079 IHI No.:

**Lab. Reference:** 24-26780277-FE-0 **Provider:** Laverty Pathology Addressee: DR OKWUN OJAH Referred by: DR. OKWUN OJAH

Date Requested: 17/05/2024 Date Performed: 22/05/2024 Date Collected: 22/05/2024 Complete: Final Specimen:

Subject(Test Name): IRON STUDIES (FE-0)

Clinical Information:

Clinical Notes : She has had generalised malaise, her iron profile..

Request Number Date Collected Time Collected Specimen Type: Serv		21278438 Oct 22 16 00:00	21681216 Feb 23 29 09:44		26780277 May 24 00:00
Iron (10-30) T'ferrin(32-48) T. Sat. (13-45) Ferritin(30-400)	umol/L	30	28	28	17
	umol/L	32	<b>31</b>	<b>31</b>	<b>31</b>
	%	<b>48</b>	<b>46</b>	<b>46</b>	28
	ug/L	280	258	365	<b>428</b>

An increased serum ferritin with a normal transferrin saturation may occur in the context of the acute-phase response or hepatic damage. This finding may atypically occur in the context of iron overload. Suggest follow-up assessment with iron studies, CRP and liver function tests, after resolution of any concurrent illness.

Requested Tests : VBF, TFT, GLU, HGA\*, MBA, INS\*, FE, FBE, A1C\*

Patient Address: PO BOX 665 491 OLD GUNNEDAH RD, NARRABRI 2390

**D.O.B:** 7/04/1952

Medicare No.: 4073625079

Sex at Birth: F

IHI No .:

Lab. Reference: 24-26780277-A1C-0 Addressee: DR OKWUN OJAH

Provider: Laverty Pathology Referred by: DR. OKWUN OJAH

Date Requested: 17/05/2024 Date Collected:

Date Performed:

22/05/2024

Specimen:

22/05/2024

Complete: Final

Subject(Test Name):

GLYCATED HAEMOGLOBIN (A1C-0)

Clinical Information:

Clinical Notes : She has had generalised malaise, her iron profile..

GLYCATED HAEMOGLOBIN (HbA1c) Request Number 25952289 26780277 Date Collected 29 Feb 24 22 May 24 Time Collected 08:06 00:00 Specimen Type: EDTA HbA1c-NGSP (4.0-6.0) % HbA1c-IFCC (20-42) mm 5.8 5.9 mmol/mo 40 41

The WHO recommends that an HbA1c cut-off of >=6.5% (48 mmol/mol) is used to diagnose type 2 diabetes.

While it is recognised that HbAlc levels approaching this cut-off place patients at increasingly higher risk of developing diabetes (<6.5%), there is no consensus as to exactly which cut-off at the lower end of the continuum to use for categorising patients as high risk. Various groups quote lower limits for at-risk patients that vary between 5.5% and 6.0% (37 and 42 mmol/mol).

Please note that HbAlc should not be used for diagnosing diabetes mellitus in the following circumstances:

- Children and young people

- Pregnancy current or within the past 2 months
- Suspected Type 1 diabetes mellitus
- Symptoms of diabetes for <2 months
- Patients who are acutely ill
- Patients taking drugs that can cause rapid onset hyperglycaemia such as corticosteroids, antipsychotic drugs
- Acute pancreatic damage or pancreatic surgery
- Kidney failure
- Patients being treated for HIV infection

Please be cautious when requesting or interpreting HbAlc when patients:

- May have an abnormal haemoglobin
- May be anaemic
- May have an altered red cell lifespan (e.g. post-splenectomy)
- May have had a recent blood transfusion

Requested Tests : VBF, TFT, GLU, HGA\*, MBA, INS\*, FE, FBE, A1C

Patient Address: PO BOX 665 491 OLD GUNNEDAH RD, NARRABRI 2390

**D.O.B:** 7/04/1952

Sex at Birth: F

Medicare No.: 4073625079

Lab. Reference: 24-26780277-INS-0

IHI No.:

Addressee: DR OKWUN OJAH

SERUM INSULIN (INS-0)

Provider:

Laverty Pathology Referred by: DR. OKWUN OJAH

Date Requested: 17/05/2024

Date Performed: 22/05/2024

Date Collected:

22/05/2024

Complete: Final

Specimen:

Subject(Test Name): Clinical Information:

Clinical Notes : She has had generalised malaise, her iron profile..

## SERUM INSULIN

Fasting status Haemolysis

Fasting 1+

Insulin

6 mU/L

(< 10)

ASSESSMENT OF INSULIN RESISTANCE (FASTING SAMPLES ONLY)

< 10 - normal insulin sensitivity

10-14 - mild insulin resistance

> 14 - insulin resistance

Insulin results from non-fasting samples are difficult to interpret although any result >= 60 mU/L is likely to indicate insulin resistance.

Requested Tests : VBF, TFT, GLU, HGA\*, MBA, INS, FE, FBE, A1C

Patient Address: PO BOX 665 491 OLD GUNNEDAH RD, NARRABRI 2390

**D.O.B:** 7/04/1952

Sex at Birth:

Medicare No.: 4073625079

IHI No.:

Lab. Reference: 24-26780277-HGA-0 Addressee: DR OKWUN OJAH

Provider: Laverty Pathology Referred by: DR. OKWUN OJAH

Date Requested: 17/05/2024 Date Collected:

Date Performed: 22/05/2024

Specimen:

22/05/2024

Complete: Final

Subject(Test Name): HAEMOCHROMATOSIS GENE STY (HGA-0)

Clinical Information:

Clinical Notes : She has had generalised malaise, her iron profile..

HEREDITARY HAEMOCHROMATOSIS GENOTYPING

Specimen:

Blood

Result:

C282Y HFE Gene Mutation:

Not Detected

H63D HFE Gene Mutation:

DETECTED HETEROZYGOUS

S65C HFE Gene Mutation:

Not Detected

#### Comments:

This sample is heterozygous for the H63D mutation which is generally associated with a normal phenotype.

Hereditary Haemochromatosis (HH) is a predominantly autosomal recessive disorder of the HFE gene. Greater than 90% of HH patients have a homozygous expression of a single mutation (C282Y) in this gene. Those who are heterozygous for C282Y are carriers but very rarely develop significant iron overload.

Other mutations in the HFE gene have also been described, the most common of which is H63D. Compound heterozygotes with one copy of H63D and one copy of C282Y may develop iron overload. This is usually not as severe as in C282Y homozygotes but may be clinically significant. Homozygotes for H63D or S65C may have iron overload in some cases, usually mild. Heterozygotes are very unlikely to have iron overload.

Treatment decisions should always be based on clinical features and iron studies as well as genetic test results, especially in cases involving mutations other than the homozygous expression of C282Y.

Family studies should be performed if a patient is homozygous for C282Y. With other genotypes family studies are less likely to detect individuals at high risk.

Dr Abhijit Kulkarni MBBS, MD, FRCPath (UK), FRCPA

Genomic Diagnostics

Requested Tests : VBF, TFT, GLU, HGA, MBA, INS, FE, FBE, A1C