



Saudi Advisory Group For Pulmonary Hypertension

Saudi Advisory Group for Pulmonary Hypertension (SAPH)

Pulmonary Hypertension Patient

Management Protocol

Patient Serial Number:

Number:

Patient Demography

Patient Name:	<input type="text"/>	Patient ID:	<input type="text"/>
Gender:	M <input type="checkbox"/> F <input type="checkbox"/>	Region:	<input type="text" value="N/C/S/W/E"/>
Date of Birth:	<input type="text"/>	Place of Birth:	<input type="text"/>
Nationality:	Saudi <input type="checkbox"/> Non-Saudi <input type="checkbox"/>	Region:	<input type="text"/>
Address:	<input type="text"/>		
Tel:	Home: <input type="text"/>	Work: <input type="text"/>	Mobile: <input type="text"/>
E-mail	<input type="text"/>		

Pulmonary Hypertension

Diagnosis made by Echo:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Diagnosis confirmed by Cath:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
PHT Class:	WHO Class I <input type="checkbox"/>	Specify: <input type="text"/>
	WHO Class II <input type="checkbox"/>	
	WHO Class III <input type="checkbox"/>	
	WHO Class IV <input type="checkbox"/>	
	WHO Class V <input type="checkbox"/>	

WHO Class I: Idiopathic, familial or related to CVD, CHD, HIV, drugs, toxins, other
WHO Class II: Related to left heart diseases
WHO Class III: Related to hypoxic pulmonary diseases
WHO Class IV: Related to thromboembolic diseases
WHO Class V: Miscellaneous

Symptoms

Shortness of Breath:
Palpitation:
Cough:
Chest pain:
Pre-syncope:
Syncope:
Dizziness:
Hemoptysis:

Duration of Symptoms:

NYHA Class:



Class I



Class II



Class III



Class IV

Signs

Vital Signs

Ht:

Wt:

BMI:

Pulmonary

Cyanosis:

Crackles:

Wheeze:

GI

Ascites:

Hepatomegaly:

Splenomegaly:

Cardiovascular

Systolic BP: > 140 140 – 90 < 90

JVP: High Normal

LL edema:

Loud P2:

Para-sternal Heave:

Pulse: Regular Irregular

Murmur: Systolic Diastolic Both

Investigations
General

Hematology

Hb HCT INR

Renal Profile

Urinary RBC Urinary Protein Creatinine

Hepatic Profile

Bilirubin ALT AST

Immune Screen

RF: Positive Neg Titer:
ANA Positive Neg Titer:
Schistosoma: Positive Neg Titer:
HIV 1-2: Positive Neg
Sickle Cell: Positive Neg
Thyroid: TSH: Antibody: Positive Neg
Other:

Coagulopathy

Protein C: Normal Low
Protein S: Normal Low
Anti - phospholipid: Normal High
D - Dimer: Normal High Titer:
Factor V Laiden: Present Absent
Hemocystinurea: Present Absent
Other:

Investigations Pulmonary

Arterial Blood Gases			
	Room Air	100% O ₂	Shunt %
pH	[]	[]	[]
PCO ₂	[]	[]	[]
PO ₂	[]	[]	[]
HCO ₃	[]	[]	[]
O ₂ Sat	[]	[]	[]

6MWT			
Distance:	[] m	% Predicted:	[]
O ₂ Sat:	Pre: []	Post:	[]

Pulmonary Function Test			
FEV ₁ :	[]	% Predicted	[]
FVC:	[]	% Predicted	[]
FEV ₁ /FVC:	[]	% Predicted	[]
DLco:	[]	% Predicted	[]

Cardiopulmonary Exercise Test			
VO ₂ Max:	[]	% Predicted	[]
Anaerobic Threshold:	[]	% Predicted	[]
Ventilatory Parameters:	VE: []	VD/Vt: []	RR: []
Cardiac Parameters: BP:	[]	[]	Pulse: []
Respiratory Limitation:	Y <input type="checkbox"/>	N <input type="checkbox"/>	
Cardiac Limitation:	Y <input type="checkbox"/>	N <input type="checkbox"/>	

Investigations Cardiac

ECG

Sinus Rhythm:	<input type="checkbox"/>	
Sinus Tachycardia:	<input type="checkbox"/>	
Arrhythmia:	<input type="checkbox"/>	
Type:		<input style="width: 100%;" type="text"/>
Right Heart Strain:	<input type="checkbox"/>	(RBBB, Right Axis, RVH, P Pulmonale)
Other Abnormality:		<input style="width: 100%;" type="text"/>

Echo

LVF:	<input style="width: 100%;" type="text"/>	EF%:	<input style="width: 100%;" type="text"/>		
PAPs:	<input style="width: 100%;" type="text"/>				
Pericardial Effusion:	<input type="checkbox"/>	RV Size: Dilated	<input type="checkbox"/>	Normal	<input type="checkbox"/>
Diastolic Dysfunction:	<input type="checkbox"/>	RVF: Impaired	<input type="checkbox"/>	Normal	<input type="checkbox"/>
RWMA:	<input type="checkbox"/>				
Other:	<input style="width: 100%;" type="text"/>				

Cardiac Catheterization

RAP	<input style="width: 100%;" type="text"/>					
mPAP:	<input style="width: 100%;" type="text"/>	PVR:	<input style="width: 100%;" type="text"/>	SVR:	<input style="width: 100%;" type="text"/>	
COP:	<input style="width: 100%;" type="text"/>	CI:	<input style="width: 100%;" type="text"/>	PCWP:	<input style="width: 100%;" type="text"/>	
SaO ₂ :	<input style="width: 100%;" type="text"/>	SVO ₂ :	<input style="width: 100%;" type="text"/>	VO ₂ :	<input style="width: 100%;" type="text"/>	
						Measured: <input type="checkbox"/>
						Estimated: <input type="checkbox"/>

Investigations Cardiac (Continue)

Vasoactive Study

Agent Used:

Positive Study:

10% drop in mPAP AND absolute number of mPAP < 40 mm Hg

OR

> 20% decrease in mPAP:

> 20% decrease in PVR:

No drop in COP:

Comments:

Negative Study:

Decrease in COP:

Decrease in SaO₂:

Decrease in Systemic BP:

Increase in PVR/PAP:

Comments:

Imaging

U/S Duplex Leg Study

Positive	<input type="checkbox"/>	Negative	<input type="checkbox"/>
Distal	<input type="checkbox"/>	Proximal	<input type="checkbox"/>
Unilateral	<input type="checkbox"/>	Bilateral	<input type="checkbox"/>

V/Q Scanning

Low probability:	<input type="checkbox"/>	Intermediate probability:	<input type="checkbox"/>
High probability:	<input type="checkbox"/>		
Other:	<input type="checkbox"/>		

Spiral CT Angiography

Positive	<input type="checkbox"/>	Negative	<input type="checkbox"/>
Central	<input type="checkbox"/>	Peripheral	<input type="checkbox"/>
Other:	<input type="checkbox"/>		

Pulmonary Angiography

Positive	<input type="checkbox"/>	Negative	<input type="checkbox"/>
Central	<input type="checkbox"/>	Peripheral	<input type="checkbox"/>
Other:	<input type="checkbox"/>		

Treatment Specific Therapy

Epoprostenol:			
IV Epoprostenol:	Y <input type="checkbox"/>	N <input type="checkbox"/>	Dose: <input style="width: 150px;" type="text"/>
Duration of Therapy:	<input style="width: 200px;" type="text"/>		
Complications:	Y <input type="checkbox"/>	N <input type="checkbox"/>	
Specify:	<input style="width: 400px; height: 30px;" type="text"/>		
Inhaled Iloprost:	Y <input type="checkbox"/>	N <input type="checkbox"/>	Frequency: <input style="width: 80px;" type="text"/>
Duration of Therapy:	<input style="width: 200px;" type="text"/>		
Complications:	Y <input type="checkbox"/>	N <input type="checkbox"/>	
Specify:	<input style="width: 400px; height: 30px;" type="text"/>		

PDE-5 Inhibitors:			
Type:	<input style="width: 200px;" type="text"/>	Y <input type="checkbox"/>	N <input type="checkbox"/>
			Dose: <input style="width: 200px;" type="text"/>
Duration of Therapy:	<input style="width: 200px;" type="text"/>		
Complications:	Y <input type="checkbox"/>	N <input type="checkbox"/>	
Specify:	<input style="width: 400px; height: 30px;" type="text"/>		

Endothelin Antagonist:			
Type:	<input style="width: 200px;" type="text"/>	Y <input type="checkbox"/>	N <input type="checkbox"/>
			Dose: <input style="width: 200px;" type="text"/>
Duration of Therapy:	<input style="width: 200px;" type="text"/>		
Complications:	Y <input type="checkbox"/>	N <input type="checkbox"/>	
Specify:	<input style="width: 400px; height: 30px;" type="text"/>		

Treatment Outcome

		At 3 Months			
Patient alive:	Y <input type="checkbox"/>	N <input type="checkbox"/>			
QOL score:	<input type="text"/>				
Functional class:	I <input type="checkbox"/>	II <input type="checkbox"/>	III <input type="checkbox"/>	IV <input type="checkbox"/>	
6 MWT:	<input type="text"/>		SaO2:	<input type="text"/>	
Echocardiography:					
RVF improved:	Y <input type="checkbox"/>	N <input type="checkbox"/>		PAPs:	<input type="text"/>
Cardiac cath:					
mPAP:	<input type="text"/>	RVP:	<input type="text"/>	PVR:	<input type="text"/>
COP:	<input type="text"/>	CI:	<input type="text"/>		

		At 1 Year			
Patient alive:	Y <input type="checkbox"/>	N <input type="checkbox"/>			
QOL score:	<input type="text"/>				
Functional class:	I <input type="checkbox"/>	II <input type="checkbox"/>	III <input type="checkbox"/>	IV <input type="checkbox"/>	
6 MWT:	<input type="text"/>		SaO2:	<input type="text"/>	
Echocardiography:					
RVF improved:	Y <input type="checkbox"/>	N <input type="checkbox"/>		PAPs:	<input type="text"/>
Cardiac cath:					
mPAP:	<input type="text"/>	RVP:	<input type="text"/>	PVR:	<input type="text"/>
COP:	<input type="text"/>	CI:	<input type="text"/>		

		At 3 Years			
Patient alive:	Y <input type="checkbox"/>	N <input type="checkbox"/>			
QOL score:	<input type="text"/>				
Functional class:	I <input type="checkbox"/>	II <input type="checkbox"/>	III <input type="checkbox"/>	IV <input type="checkbox"/>	
6 MWT:	<input type="text"/>		SaO2:	<input type="text"/>	
Echocardiography:					
RVF improved:	Y <input type="checkbox"/>	N <input type="checkbox"/>		PAPs:	<input type="text"/>
Cardiac cath:					
mPAP:	<input type="text"/>	RVP:	<input type="text"/>	PVR:	<input type="text"/>
COP:	<input type="text"/>	CI:	<input type="text"/>		