

# Henoch-Schonlein Purpura

## Diagnosis and management in children

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## Version Control Sheet

Version	Date	Author	Status	Comment
1.0	January 2015	Dr Georgios Eleftheriou, Paediatric registrar Dr Mervyn Jaswon, Honorary Consultant paediatrician Dr Hannah Mitchell, Foundation Year Doctor	OFF LINE	New guideline ratified at 21 <sup>st</sup> January 2015 meeting of the Clinical Guidelines Committee
2.0	May 2019	Dr Mervyn Jaswon, Honorary Consultant paediatrician	LIVE	Content reviewed – no change.

### ➤ **Criteria for use**

Use for all suspected cases of Henoch-Schönlein Purpura (HSP) at The Whittington Hospital

### ➤ **Background/ introduction**

Henoch-Schonlein purpura (HSP) is the commonest systemic vasculitis of childhood. Diagnosis and follow-up are essential in view of potential for renal involvement and development of chronic renal failure, with significant morbidity.

#### **Epidemiology:**

HSP has a reported incidence of 10-20/100,000 children per year (1). It is commonest in the 4-7yr age range and 75% of cases occur in those <10yrs. It is twice as common in boys.

#### **Aetiology:**

This is unknown however many studies suggest a possible infective trigger, often an upper respiratory tract infection. Organisms that have been implicated include group A  $\beta$ -haemolytic streptococcus, hepatitis A and B, CMV, adenovirus, mycoplasma, human parvovirus B19, varicella and scarlet fever. HSP can occasionally follow vaccinations including MMR, pneumococcal, influenza, meningococcal and hepatitis B.

### ➤ **Inclusion/ exclusion criteria**

**Symptoms/signs suggestive of possible diagnosis of HSP – one or more may be present**

- Palpable purpura - Predominantly lower limb:
- Diffuse abdominal pain
- Arthritis (acute) or arthralgia
- Renal involvement

Full diagnostic criteria available in Appendix A

## COMMON FEATURES (3)

### Skin

The typical rash is of palpable purpura symmetrically distributed over extensor, dependant surfaces of the lower limbs and buttocks (Figures 1 and 2). The rash is usually the first clinical sign of HSP. It may also involve the arms, face and ears but usually spares the trunk. The purpura can range from petechiae to ecchymoses. The purpura can be preceded by urticarial or erythematous maculopapular lesions. Very rarely lesions can be bullous.



Figure 1 and 2: Typical palpable purpura associate with HSP

### Gastrointestinal

This occurs in over half of cases and can precede the rash by up to 14 days. Abdominal pain is the commonest symptom and is usually colicky. Other symptoms may be vomiting and gastrointestinal haemorrhage. Intussuseption is a recognised complication.

### Joints

Arthritis and/or athralgia usually affect the larger joints on the lower limb, typically the ankles and knees. Upper limbs may be affected too. Arthritis and/or arthralgia can be the presenting feature in up to 25% with HSP. Joint involvement does not lead to permanent damage, but can cause considerable morbidity. NSAIDs can be used if no renal impairment.

### Renal

There is renal involvement in 20-60% of patients. This can be haematuria, proteinuria, nephritic syndrome, nephrotic syndrome, renal impairment and hypertension. Usually renal involvement develops within 4 weeks of onset, and almost all within 3 months.

The long term risk of permanent renal impairment in patients with minor urine abnormalities is 1-2%. This rises to ~20% in children with nephrotic or nephritic features. Hypertension can occur without renal involvement and if this persists despite resolution of HSP, other causes of hypertension should be screened for.

**Urological:** Orchitis can occur in up to 25%. Patients should have urology opinion if unable to exclude testicular torsion clinically. Genital oedema may occur with hypoalbuminaemia.

### **Rare complications**

**Neurological:** Headache, encephalopathy with mood change, seizures and intracranial haemorrhage.

**Pulmonary:** Diffuse alveolar haemorrhage which can present as interstitial pneumonia or interstitial fibrosis.

**Gastrointestinal:** Protein losing enteropathy, pancreatitis and hydrops of the gall bladder

**Differential diagnoses:** The diagnoses not to miss are haematological malignancies, thrombocytopenia of any cause, and septicaemia. Any cause of petechial rash including non-accidental injury should be considered.

## ➤ **Investigations**

**INITIAL INVESTIGATIONS** (aimed at excluding other diagnoses and assessing degree of renal involvement):

- **Full blood count and film** – may show anaemia, leucocytosis, thrombocytosis (associated with more severe disease)
- **Urea, creatinine and electrolytes** – assesses renal involvement
- **Coagulation screen** – usually normal in HSP
- **Liver and bone profile** – albumin may be low
- **ESR** – likely raised
- **Urine dipstick**
- If urine dipstick shows any degree of proteinuria or haematuria, send **urine albumin:creatinine ratio** and **urine microscopy URGENTLY** to look for red cell casts
- **Measure blood pressure** on 3 separate occasions with appropriately sized collar and cuff (see Appendix C)
- If evidence of recent streptococcal infection perform **ASOT (anti-streptolysin – O titre)**
- Record baseline **height** and **weight** and plot on an appropriate growth chart

**SIGNIFICANT RENAL INVOLVEMENT:** Any child with features listed below will need to have **further investigations** and discussion with nephrologist:

1. Hypertension – Blood pressure >95<sup>th</sup> centile on 3 separate readings
2. Urine albumin creatinine ratio >200mg/mmol
3. Urine albumin creatinine ratio 100-200mg/mmol and increasing trend
4. Macroscopic haematuria
5. Serum albumin <30g/dl
6. Raised creatinine

### **FURTHER INVESTIGATIONS FOR PATIENTS WITH SIGNIFICANT RENAL INVOLVEMENT**

- Full autoimmune profile – C3, C4, ANA, dsDNA, ANCA, immunoglobulins
- Renal ultrasound
- If child systemically unwell send cultures to isolate infection – blood cultures, swabs, CXR, urine MC&S. Send CRP.
- **DISCUSS WITH ATTENDING CONSULTANT +/- NEPHROLOGY TEAM** (at Great Ormond Street Hospital) and admit to ward

### **➤ Clinical management**

#### **No significant renal involvement**

These are patients who have negative urine dipstick or have proteinuria on urine dipstick without evidence of significant renal involvement. These patients may be discharged from hospital provided they are educated about diagnosis and safety netted as to features which should prompt them to seek medical attention, and follow up is arranged. **Provide patients with urine pot to bring early morning urine sample to 7-day review (see below) and information leaflet (Appendix B).**

#### **Significant renal Involvement**

For those admitted to the ward with evidence of renal involvement management must be discussed with the attending consultant +/- the nephrology team.

General guidance for renal patients on ward:

- Record baseline height and weight
- Daily weights
- Strict fluid balance measurements
- Dipstick every urine and record results
- Early morning urine albumin:creatinine ratio
- Regular blood pressure measurement – 4hrly
- Regular review of perfusion for hypovolaemia e.g. capillary refill time
- Penicillin V or Amoxicillin prophylaxis if nephrotic or hypoalbuminaemic
- Encourage mobility to reduce risk of thrombosis
- Low salt diet
- Discuss fluid restriction and further treatment with nephrologist

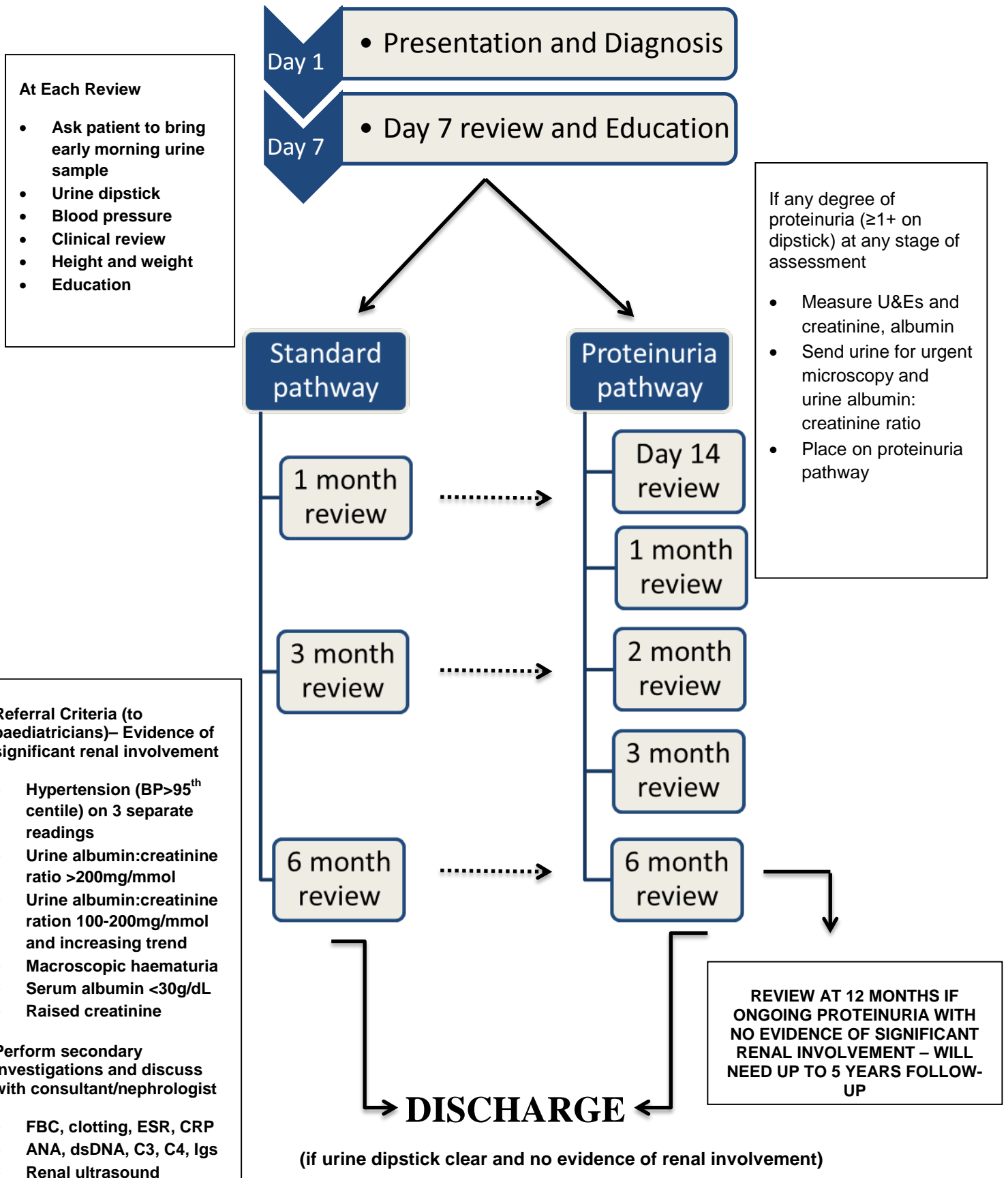
## ➤ Follow-up

All patients with a diagnosis of HSP will need clinical review and education at 7 days post discharge. Patients are then stratified into one of two separate pathways for follow-up: Standard pathway or Proteinuria pathway based on their urine dipstick results (see figure 3):

### 7 day review (ALL PATIENTS)

- Can be in Children's ambulatory unit (CAU) or 10-12 clinic, or by GP if happy to (see GP leaflet **Idrive/Paediatrics/clinical information/HSP/Database**)
- Perform urine dipstick
- Record blood pressure
- Clinical review for complications of HSP and multisystemic involvement
- Education – give a leaflet (Appendix B), explain possible complications
- Provide parents with an emergency card
- **Record patients details into HSP database: Idrive/Paediatrics/clinical information/HSP/Database**

**Figure 3 – HSP follow-up pathways**





If  $\geq 1+$  proteinuria on urine dipstick:

- Perform U&Es and serum albumin
- Urine albumin:creatinine ratio
- Urine microscopy
- Will enter proteinuria follow up pathway

**If evidence of significant renal involvement from investigations admit to ward and discuss with nephrologist.**

If no proteinuria on dipstick:

- Will enter standard follow-up pathway

### **STANDARD FOLLOW-UP PATHWAY**

- Review patient at 1 month, 3 months and 6 months post diagnosis – can be in hospital or GP/community
- Perform urine dipstick, blood pressure, clinical review and education
- Ask patient to bring early morning urine sample to appointment for dipstick and if necessary to send for albumin:creatinine ratio

If  $\geq 1+$  proteinuria on urine dipstick:

- Perform U&Es and serum albumin
- Urine albumin:creatinine ratio
- Urine microscopy – look for red cell casts
- Will enter proteinuria follow up pathway

**If evidence of significant renal involvement from investigations admit to ward and discuss with attending consultant +/- nephrologist and perform secondary investigations**

### **PROTEINURIA FOLLOW-UP PATHWAY**

- Review at day 14, 1 month, 2 months, 3 months, 4 months and 6 months, 12 months (if necessary) – may need 5 year follow-up or more if renal involvement at presentation
- Ask patient to bring early morning urine sample to appointment for dipstick
- More intense follow-up as patients who develop nephritic or nephrotic features are at greater risk of poor renal outcome and these features are more likely to

present in the first few months after diagnosis and if there is proteinuria on urine dipstick

If  $\geq 1+$  proteinuria on urine dipstick:

- Perform U&Es and serum albumin
- Urine albumin:creatinine ratio
- Urine microscopy – look for red cell casts
- **If evidence of significant renal involvement at any point during follow up admit to ward and discuss with nephrologist and perform secondary investigations**

### **DISCHARGE**

**IN EITHER FOLLOW-UP PATHWAY IF URINAYLSIS AND BLOOD PRESSURE HAS REMAINED OR BECOMES NORMAL CHILDREN CAN BE DISCHARGED AT 6 MONTHS**

➤ **APPENDIX A – Diagnostic criteria for HSP**

**Table 1 EULAR/PRINTO/PRES criteria for HSP diagnosis**

Criterion	Glossary
Purpura (mandatory criterion)	Purpura (commonly palpable and in crops) or petechiae, with lower limb predominance, * not related to thrombocytopenia
1. Abdominal pain	Diffuse abdominal colicky pain with acute onset assessed by history and physical examination. May include intussusception and gastrointestinal bleeding
2. Histopathology	Typically leucocytoclastic vasculitis with predominant IgA deposit or proliferative glomerulonephritis with predominant IgA deposit
3. Arthritis or arthralgias	Arthritis of acute onset defined as joint swelling or joint pain with limitation on motion Arthralgia of acute onset defined as joint pain without joint swelling or limitation on motion
4. Renal involvement	Proteinuria >0.3 g/24 h or >30 mmol/mg of urine albumin/creatinine ratio on a spot morning sample Haematuria or red blood cell casts: >5 red blood cells/high power field or red blood cells casts in the urinary sediment or ≥2+ on dipstick
HSP EULAR/PRINTO/PRES Ankara 2008 classification definition: κ 0.90 (95% CI 0.84 to 0.96)	Purpura or petechiae (mandatory) with lower limb predominance* and at least one of the four following criteria: Abdominal pain Histopathology Arthritis or arthralgia Renal involvement

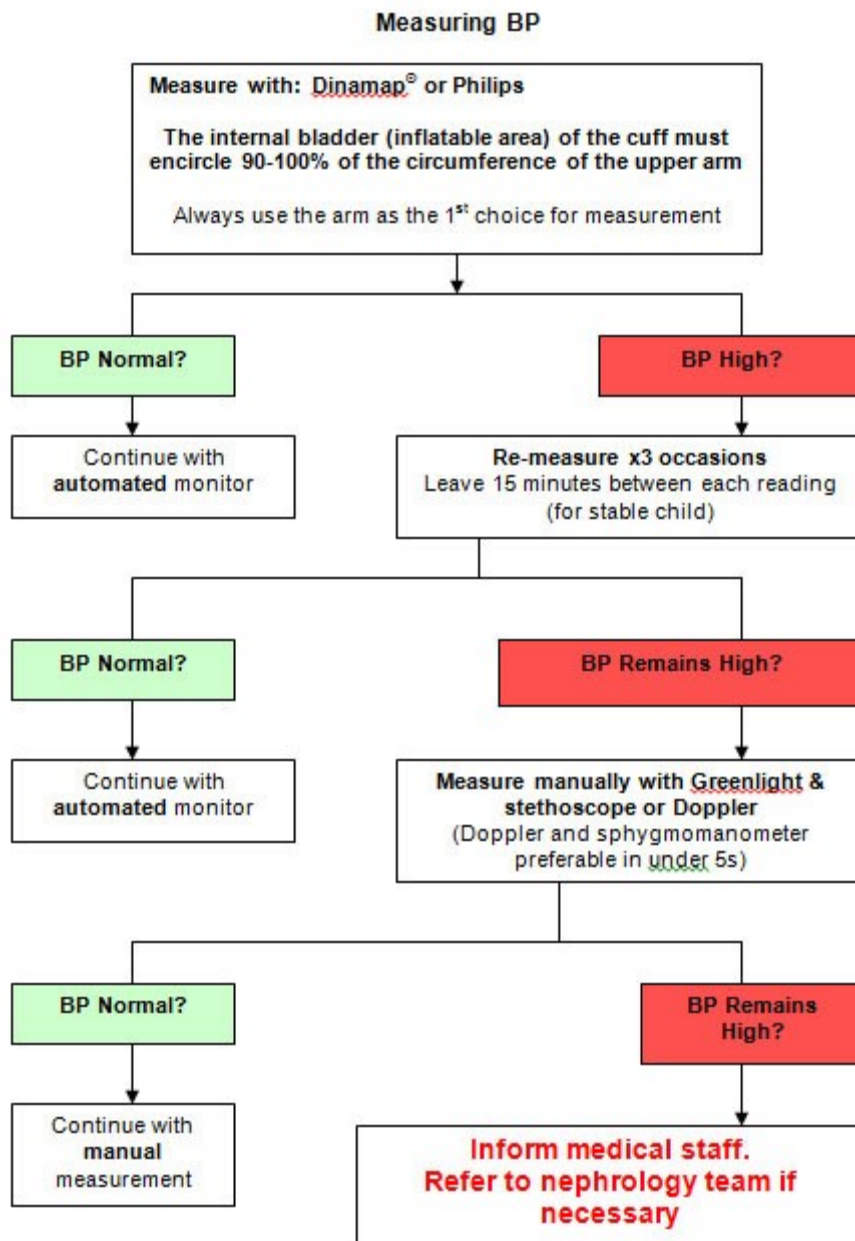
➤ **APPENDIX B – Information leaflet**

Information leaflet from Great Ormond Street Hospital about HSP

<http://www.gosh.nhs.uk/medical-conditions/search-for-medical-conditions/henoch-schonlein-purpura/henoch-schonlein-purpura-information//>

➤ APPENDIX C – Blood pressure measurement and values

Measure patient's height and plot on a growth chart



For example a 2 year old boy on 25<sup>th</sup> centile for height for his age will be hypertensive if blood pressure  $\geq 104$ mmHg systolic and/or  $\geq 60$ mmHg diastolic

## Blood pressure value tables for boys (5)

**TABLE 3.** BP Levels for Boys by Age and Height Percentile

Age, y	BP Percentile	SBP, mm Hg								DBP, mm Hg					
		Percentile of Height								Percentile of Height					
		5th	10th	25th	50th	75th	90th	95th	5th	10th	25th	50th	75th	90th	95th
1	50th	80	81	83	85	87	88	89	34	35	36	37	38	39	39
	90th	94	95	97	99	100	102	103	49	50	51	52	53	53	54
	95th	98	99	101	103	104	106	106	54	54	55	56	57	58	58
	99th	105	106	108	110	112	113	114	61	62	63	64	65	66	66
2	50th	84	85	87	88	90	92	92	39	40	41	42	43	44	44
	90th	97	99	100	102	104	105	106	54	55	56	57	58	58	59
	95th	101	102	104	106	108	109	110	59	59	60	61	62	63	63
	99th	109	110	111	113	115	117	117	66	67	68	69	70	71	71
3	50th	86	87	89	91	93	94	95	44	44	45	46	47	48	48
	90th	100	101	103	105	107	108	109	59	59	60	61	62	63	63
	95th	104	105	107	109	110	112	113	63	63	64	65	66	67	67
	99th	111	112	114	116	118	119	120	71	71	72	73	74	75	75
4	50th	88	89	91	93	95	96	97	47	48	49	50	51	51	52
	90th	102	103	105	107	109	110	111	62	63	64	65	66	66	67
	95th	106	107	109	111	112	114	115	66	67	68	69	70	71	71
	99th	113	114	116	118	120	121	122	74	75	76	77	78	78	79
5	50th	90	91	93	95	96	98	98	50	51	52	53	54	55	55
	90th	104	105	106	108	110	111	112	65	66	67	68	69	69	70
	95th	108	109	110	112	114	115	116	69	70	71	72	73	74	74
	99th	115	116	118	120	121	123	123	77	78	79	80	81	81	82
6	50th	91	92	94	96	98	99	100	53	53	54	55	56	57	57
	90th	105	106	108	110	111	113	113	68	68	69	70	71	72	72
	95th	109	110	112	114	115	117	117	72	72	73	74	75	76	76
	99th	116	117	119	121	123	124	125	80	80	81	82	83	84	84
7	50th	92	94	95	97	99	100	101	55	55	56	57	58	59	59
	90th	106	107	109	111	113	114	115	70	70	71	72	73	74	74
	95th	110	111	113	115	117	118	119	74	74	75	76	77	78	78
	99th	117	118	120	122	124	125	126	82	82	83	84	85	86	86
8	50th	94	95	97	99	100	102	102	56	57	58	59	60	60	61
	90th	107	109	110	112	114	115	116	71	72	72	73	74	75	76
	95th	111	112	114	116	118	119	120	75	76	77	78	79	79	80
	99th	119	120	122	123	125	127	127	83	84	85	86	87	87	88
9	50th	95	96	98	100	102	103	104	57	58	59	60	61	61	62
	90th	109	110	112	114	115	117	118	72	73	74	75	76	76	77
	95th	113	114	116	118	119	121	121	76	77	78	79	80	81	81
	99th	120	121	123	125	127	128	129	84	85	86	87	88	88	89
10	50th	97	98	100	102	103	105	106	58	59	60	61	61	62	63
	90th	111	112	114	115	117	119	119	73	73	74	75	76	77	78
	95th	115	116	117	119	121	122	123	77	78	79	80	81	81	82
	99th	122	123	125	127	128	130	130	85	86	86	88	88	89	90
11	50th	99	100	102	104	105	107	107	59	59	60	61	62	63	63
	90th	113	114	115	117	119	120	121	74	74	75	76	77	78	78
	95th	117	118	119	121	123	124	125	78	78	79	80	81	82	82
	99th	124	125	127	129	130	132	132	86	86	87	88	89	90	90
12	50th	101	102	104	106	108	109	110	59	60	61	62	63	63	64
	90th	115	116	118	120	121	123	123	74	75	75	76	77	78	79
	95th	119	120	122	123	125	127	127	78	79	80	81	82	82	83
	99th	126	127	129	131	133	134	135	86	87	88	89	90	90	91
13	50th	104	105	106	108	110	111	112	60	60	61	62	63	64	64
	90th	117	118	120	122	124	125	126	75	75	76	77	78	79	79
	95th	121	122	124	126	128	129	130	79	79	80	81	82	83	83
	99th	128	130	131	133	135	136	137	87	87	88	89	90	91	91
14	50th	106	107	109	111	113	114	115	60	61	62	63	64	65	65
	90th	120	121	123	125	126	128	128	75	76	77	78	79	79	80
	95th	124	125	127	128	130	132	132	80	80	81	82	83	84	84
	99th	131	132	134	136	138	139	140	87	88	89	90	91	92	92
15	50th	109	110	112	113	115	117	117	61	62	63	64	65	66	66
	90th	122	124	125	127	129	130	131	76	77	78	79	80	80	81
	95th	126	127	129	131	133	134	135	81	81	82	83	84	85	85
	99th	134	135	136	138	140	142	142	88	89	90	91	92	93	93
16	50th	111	112	114	116	118	119	120	63	63	64	65	66	67	67
	90th	125	126	128	130	131	133	134	78	78	79	80	81	82	82
	95th	129	130	132	134	135	137	137	82	83	83	84	85	86	87
	99th	136	137	139	141	143	144	145	90	90	91	92	93	94	94
17	50th	114	115	116	118	120	121	122	65	66	66	67	68	69	70
	90th	127	128	130	132	134	135	136	80	80	81	82	83	84	84
	95th	131	132	134	136	138	139	140	84	85	86	87	87	88	89
	99th	139	140	141	143	145	146	147	92	93	93	94	95	96	97

The 90th percentile is 1.28 SD, the 95th percentile is 1.645 SD, and the 99th percentile is 2.326 SD over the mean. For research purposes, the SDs in Table B1 allow one to compute BP Z scores and percentiles for boys with height percentiles given in Table 3 (ie, the 5th, 10th, 25th, 50th, 75th, 90th, and 95th percentiles). These height percentiles must be converted to height Z scores given by: 5% = -1.645; 10% = -1.28; 25% = -0.68; 50% = 0; 75% = 0.68; 90% = 1.28; and 95% = 1.645, and then computed according to the methodology in steps 2 through 4 described in Appendix B. For children with height percentiles other than these, follow steps 1 through 4 as described in Appendix B.

## Blood pressure value tables for girls (5)

**TABLE 4.** BP Levels for Girls by Age and Height Percentile

Age, y	BP Percentile	SBP, mm Hg							DBP, mm Hg						
		Percentile of Height							Percentile of Height						
		5th	10th	25th	50th	75th	90th	95th	5th	10th	25th	50th	75th	90th	95th
1	50th	83	84	85	86	88	89	90	38	39	39	40	41	41	42
	90th	97	97	98	100	101	102	103	52	53	53	54	55	55	56
	95th	100	101	102	104	105	106	107	56	57	57	58	59	59	60
	99th	108	108	109	111	112	113	114	64	64	65	65	66	67	67
2	50th	85	85	87	88	89	91	91	43	44	44	45	46	46	47
	90th	98	99	100	101	103	104	105	57	58	58	59	60	61	61
	95th	102	103	104	105	107	108	109	61	62	62	63	64	65	65
	99th	109	110	111	112	114	115	116	69	69	70	70	71	72	72
3	50th	86	87	88	89	91	92	93	47	48	48	49	50	50	51
	90th	100	100	102	103	104	106	106	61	62	62	63	64	64	65
	95th	104	104	105	107	108	109	110	65	66	66	67	68	68	69
	99th	111	111	113	114	115	116	117	73	73	74	74	75	76	76
4	50th	88	88	90	91	92	94	94	50	50	51	52	52	53	54
	90th	101	102	103	104	106	107	108	64	64	65	66	67	67	68
	95th	105	106	107	108	110	111	112	68	68	69	70	71	71	72
	99th	112	113	114	115	117	118	119	76	76	76	77	78	79	79
5	50th	89	90	91	93	94	95	96	52	53	53	54	55	55	56
	90th	103	103	105	106	107	109	109	66	67	67	68	69	69	70
	95th	107	107	108	110	111	112	113	70	71	71	72	73	73	74
	99th	114	114	116	117	118	120	120	78	78	79	79	80	81	81
6	50th	91	92	93	94	96	97	98	54	54	55	56	56	57	58
	90th	104	105	106	108	109	110	111	68	68	69	70	70	71	72
	95th	108	109	110	111	113	114	115	72	72	73	74	74	75	76
	99th	115	116	117	119	120	121	122	80	80	80	81	82	83	83
7	50th	93	93	95	96	97	99	99	55	56	56	57	58	58	59
	90th	106	107	108	109	111	112	113	69	70	70	71	72	72	73
	95th	110	111	112	113	115	116	116	73	74	74	75	76	76	77
	99th	117	118	119	120	122	123	124	81	81	82	82	83	84	84
8	50th	95	95	96	98	99	100	101	57	57	57	58	59	60	60
	90th	108	109	110	111	113	114	114	71	71	71	72	73	74	74
	95th	112	112	114	115	116	118	118	75	75	75	76	77	78	78
	99th	119	120	121	122	123	125	125	82	82	83	83	84	85	86
9	50th	96	97	98	100	101	102	103	58	58	58	59	60	61	61
	90th	110	110	112	113	114	116	116	72	72	72	73	74	75	75
	95th	114	114	115	117	118	119	120	76	76	76	77	78	79	79
	99th	121	121	123	124	125	127	127	83	83	84	84	85	86	87
10	50th	98	99	100	102	103	104	105	59	59	59	60	61	62	62
	90th	112	112	114	115	116	118	118	73	73	73	74	75	76	76
	95th	116	116	117	119	120	121	122	77	77	77	78	79	80	80
	99th	123	123	125	126	127	129	129	84	84	85	86	86	87	88
11	50th	100	101	102	103	105	106	107	60	60	60	61	62	63	63
	90th	114	114	116	117	118	119	120	74	74	74	75	76	77	77
	95th	118	118	119	121	122	123	124	78	78	78	79	80	81	81
	99th	125	125	126	128	129	130	131	85	85	86	87	87	88	89
12	50th	102	103	104	105	107	108	109	61	61	61	62	63	64	64
	90th	116	116	117	119	120	121	122	75	75	75	76	77	78	78
	95th	119	120	121	123	124	125	126	79	79	79	80	81	82	82
	99th	127	127	128	130	131	132	133	86	86	87	88	88	89	90
13	50th	104	105	106	107	109	110	110	62	62	62	63	64	65	65
	90th	117	118	119	121	122	123	124	76	76	76	77	78	79	79
	95th	121	122	123	124	126	127	128	80	80	80	81	82	83	83
	99th	128	129	130	132	133	134	135	87	87	88	89	89	90	91
14	50th	106	106	107	109	110	111	112	63	63	63	64	65	66	66
	90th	119	120	121	122	124	125	125	77	77	77	78	79	80	80
	95th	123	123	125	126	127	129	129	81	81	81	82	83	84	84
	99th	130	131	132	133	135	136	136	88	88	89	90	90	91	92
15	50th	107	108	109	110	111	113	113	64	64	64	65	66	67	67
	90th	120	121	122	123	125	126	127	78	78	78	79	80	81	81
	95th	124	125	126	127	129	130	131	82	82	82	83	84	85	85
	99th	131	132	133	134	136	137	138	89	89	90	91	91	92	93
16	50th	108	108	110	111	112	114	114	64	64	65	66	66	67	68
	90th	121	122	123	124	126	127	128	78	78	79	80	81	81	82
	95th	125	126	127	128	130	131	132	82	82	83	84	85	85	86
	99th	132	133	134	135	137	138	139	90	90	90	91	92	93	93
17	50th	108	109	110	111	113	114	115	64	65	65	66	67	67	68
	90th	122	122	123	125	126	127	128	78	79	79	80	81	81	82
	95th	125	126	127	129	130	131	132	82	83	83	84	85	85	86
	99th	133	133	134	136	137	138	139	90	90	91	91	92	93	93

\* The 90th percentile is 1.28 SD, the 95th percentile is 1.645 SD, and the 99th percentile is 2.326 SD over the mean. For research purposes, the SDs in Table B1 allow one to compute BP Z scores and percentiles for girls with height percentiles given in Table 4 (ie, the 5th, 10th, 25th, 50th, 75th, 90th, and 95th percentiles). These height percentiles must be converted to height Z scores given by: 5% = -1.645; 10% = -1.28; 25% = -0.68; 50% = 0; 75% = 0.68; 90% = 1.28; and 95% = 1.645 and then computed according to the methodology in steps 2 through 4 described in Appendix B. For children with height percentiles other than these, follow steps 1 through 4 as described in Appendix B.

➤ **Contacts (inside and outside the Trust including out-of-hours contacts)**

- Paediatric consultant on call
- Paediatric registrar on call – bleep 3111
- Dr Andrew Robins (in hours only)

➤ **References (evidence upon which the guideline is based)**

1. Ozen et al. EULAR/PRINTO/PRES criteria for Henoch–Schönlein purpura, childhood polyarteritis nodosa, childhood Wegener granulomatosis and childhood Takayasu arteritis: Ankara 2008. Part II: Final classification criteria *.Ann Rheum Dis 2010;69:798–806*
2. L. Watson et al. A 5 year review of henoch Schönlein purpura at a tertiary paediatric hospital. *Arch Dis Child 2011;96:A69-A70*
3. E J Tizard and M J J Hamilton-Ayres. Henoch Schönlein Purpura. *Arch Dis Child Ed Pract 2008;93:1-8*
4. Narchi H (2005) Risk of long term renal impairment and duration of follow up recommended for Henoch-Schonlein purpura with normal or minimal urinary findings: a systematic review. *Arch Dis Child 90: 916–920.*
5. National High Blood Pressure Education Program Working Group (2004) High blood pressure in children and adolescents. The fourth report on the diagnosis, evaluation, and treatment of high blood pressure in children and adolescents. *Pediatrics 114(2 suppl 4th report): 555-576*

➤ **Compliance with this guideline (how and when the guideline will be monitored e.g. audit and which committee the results will be reported to) Please use the tool provided at the end of this template**

- Audit compliance with guideline using database in 6 months from implementation
- Review guideline 2 yearly from implementation
- Responsible persons for review: Dr Georgios Eleftheriou, Dr Andrew Robins, Dr Mervyn Jaswon

To be completed and attached to any procedural document when submitted to the appropriate committee for consideration and approval

		Yes/No	Comments
1.	<b>Does the procedural document affect one group less or more favourably than another on the basis of:</b>		
	• Race	No	
	• Ethnic origins (including gypsies and travellers)	No	
	• Nationality	No	
	• Gender	No	
	• Culture	No	
	• Religion or belief	No	
	• Sexual orientation including lesbian, gay and bisexual people	No	
	• Age	No	
	• Disability - learning disabilities, physical disability, sensory impairment and mental health problems	No	
2.	<b>Is there any evidence that some groups are affected differently?</b>	No	
3.	<b>If you have identified potential discrimination, are any exceptions valid, legal and/or justifiable?</b>	No	
4.	<b>Is the impact of the procedural document likely to be negative?</b>	No	
5.	<b>If so can the impact be avoided?</b>	N/A	
6.	<b>What alternatives are there to achieving the procedural document without the impact?</b>	N/A	
7.	<b>Can we reduce the impact by taking different action?</b>	N/A	

If you have identified a potential discriminatory impact of this procedural document, please refer it to the Director of Human Resources, together with any suggestions as to the action required to avoid/reduce this impact.

For advice in respect of answering the above questions, please contact the Director of Human Resources.



## Checklist for the Review and Approval of Procedural Document

To be completed and attached to any procedural document when submitted to the relevant committee for consideration and approval.

	Title of document being reviewed:	Yes/No	Comments
<b>1.</b>	<b>Title</b>		
	Is the title clear and unambiguous?	Yes	
	Is it clear whether the document is a guideline, policy, protocol or standard?	Yes	
<b>2.</b>	<b>Rationale</b>		
	Are reasons for development of the document stated?	Yes	
<b>3.</b>	<b>Development Process</b>		
	Is it clear that the relevant people/groups have been involved in the development of the document?	Yes	
	Are people involved in the development?	Yes	
	Is there evidence of consultation with stakeholders and users?	Yes	
<b>4.</b>	<b>Content</b>		
	Is the objective of the document clear?	Yes	
	Is the target population clear and unambiguous?	Yes	
	Are the intended outcomes described?	Yes	
<b>5.</b>	<b>Evidence Base</b>		
	Are key references cited in full?	N/A	
	Are supporting documents referenced?	N/A	
<b>6.</b>	<b>Approval</b>		
	Does the document identify which committee/group will approve it?	Yes	
<b>7.</b>	<b>Dissemination and Implementation</b>		
	Is there an outline/plan to identify how this will be done?	Yes	
<b>8.</b>	<b>Document Control</b>		
	Does the document identify where it will be held?	Yes	

	<b>Title of document being reviewed:</b>	<b>Yes/No</b>	<b>Comments</b>
<b>9.</b>	<b>Process to Monitor Compliance and Effectiveness</b>		
	Are there measurable standards or KPIs to support the monitoring of compliance with and effectiveness of the document?	Yes	
	Is there a plan to review or audit compliance with the document?	Yes	
<b>10.</b>	<b>Review Date</b>		
	Is the review date identified?	Yes	
	Is the frequency of review identified? If so is it acceptable?	Yes	
<b>11.</b>	<b>Overall Responsibility for the Document</b>		
	Is it clear who will be responsible for co-ordinating the dissemination, implementation and review of the document?	Yes	

<b>Executive Sponsor Approval</b>			
If you approve the document, please sign and date it and forward to the author. Procedural documents will not be forwarded for ratification without Executive Sponsor Approval			
Name		Date	
Signature			
<b>Relevant Committee Approval</b>			
The Director of Nursing and Patient Experience's signature below confirms that this procedural document was ratified by the appropriate Governance Committee.			
Name		Date	
Signature			
<b>Responsible Committee Approval – only applies to reviewed procedural documents with minor changes</b>			
The Committee Chair's signature below confirms that this procedural document was ratified by the responsible Committee			
Name		Date	
Name of Committee		Name & role of Committee Chair	
Signature			

## Tool to Develop Monitoring Arrangements for Policies and guidelines

What key element(s) need(s) monitoring as per local approved policy or guidance?	Who will lead on this aspect of monitoring?  Name the lead and what is the role of the multidisciplinary team or others if any.	What tool will be used to monitor/check/observe/Assess/inspect/ authenticate that everything is working according to this key element from the approved policy?	How often is the need to monitor each element?  How often is the need complete a report ?  How often is the need to share the report?	What committee will the completed report go to?
Element to be monitored	Lead	Tool	Frequency	Reporting arrangements
-HSP patient database and follow up arrangements and outcomes	-Dr Mervyn Jaswon, consultant paediatrician  -Dr Andrew Robins, consultant paediatrician	-Making of a database of outcomes and patients with HSP  -Regular audit	-Annual audit and review of database	-Paediatric team at Whittington Hospital

