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Henoch-Schonlein Purpura in 1-12 years old Children In Sulaimaniyah City , Kurdistan Regional Government Of Iraq

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Abstract

***Background*:** Henoch-Schönlein purpura is an acute immunoglobulin A (IgA)–mediated disorder characterized by a generalized vasculitis involving the small vessels of the skin, gastrointestinal (GI) tract, kidneys, joints, and rarely the lungs and the central nervous system (CNS).

***Objectives*:** An attempt to identify the characteristics of this disease that is considered as quite common problem in our city, to identify the epidemiological, clinical, laboratory features and complications of HSP in our locality and to find the mode of treatments used by pediatricians and trying to uniform the management in a scientific way.

***Patients and Methods*:** Sixty five patients with HSP hospitalized in Sulaimaniyah pediatric Teaching Hospital in Kurdistan/ Iraq were included in this retrospective study from 1st of January 2013 to 31st of December 2014; they were selected by Case sheets based on the diagnosis of HSP at discharge time.

Results: Of 65 patients, 37 (56.9%) were boys and 28 (43.1) were females, with a male to female ratio of 1.3:1. The patients' ages ranged from (2 to 12) years, with a mean of 6 years. Approximately 61% of cases were presented during winter and spring. Upper respiratory tract infection preceded HSP in (36.9%) of the patients. The main clinical features included skin rash (100%), skeletal manifestation (66%), gastrointestinal manifestation (70.8%), renal involvement (26.16%), and Genital involvement (5.4%) in males. Fecal occult bloods were positive in 10/29(34.5%) of the patients. Forty one (63%) patients received corticosteroid therapy.

Conclusions: There were no major differences in the epidemiological and clinical criteria of HSP in Sulaimaniyah with that most of similar studies done elsewhere. GIT involvement more common than skeletal involvement. Many patients had been treated with corticosteroid therapy.

Introduction

Henoch-Schönlein purpura (HSP; also referred to as Schönlein-Henoch purpura, anaphylactoid purpura, or purpura rheumatica) is an acute immunoglobulin A (IgA)–mediated disorder characterized by a generalized vasculitis involving the small vessels of the skin, the gastrointestinal (GI) tract, the kidneys, the joints, and rarely the lungs and the central nervous system (CNS).[1, 2,]

The first description of this disorder was probably that of a young boy with ‘‘bloody points’’ over the shins of his legs, abdominal pain, blood in the stools and urine and painful subcutaneous edema, described by William Heberden in 1801.

In 1837 Johann Scho¨nlein described the association of purpura and joint pain as ‘‘Peliosis rheumatica’’. Eduard Henoch, Scho¨nlein’s former student noted gastrointestinal involvement in association with purpura and arthritis in 1868 and subsequently he recorded renal involvement too. [3]

HSP occurs worldwide and affects all ethnic groups. The incidence of HSP is estimated at 14- 20/100,000 children per year and affects males more than females, with a 1.2-1.8 1 male to female ratio. Approximately 90% of HSP cases occur in children usually between the ages of 3 and 10 yr. HSP is distinctly less common in adults in whom severe and chronic complications are often encountered. HSP is more common in the fall, winter, or spring and is unusual in summer months. Many cases of HSP follow a documented upper respiratory infection [4] other infectious agents, vaccinations, and insect bites also have been implicated as possible triggers for HSP (IgAV) [5]. The rate of HSP (IgAV) is significantly higher (approximately 5 percent) in patients with familial Mediterranean fever [6,7].

The etiology of HSP remains to be clearly defined but is thought to be multifactorial, with genetic, environmental, and antigenic components.

More than 75% of patients report antecedent URTI, pharyngeal infection, or GI infection. Multiple bacterial and viral infectious agents have been associated with the development of HSP, and cases also have been reported after drug ingestions and vaccinations [8].Several triggering agents have been proposed (Table 1):

Table: Triggering factors of HSP [9, 10, 11]

Group	Triggering factors
Bacteria	**Streptococcus-pyogen, Staphylococcus-aureus, MycoPlasma, Shigella, Yesinia, Salmonella, Legionella, Campylobacter, Helicobacter- pylori.**
Viruses	**Parvovirus, Adenovirus, Hepatitis B, Epstein-Barr, Varicella, HSV, HIV, Coxsakei.**
Drugs	**Ampicillin, Erythromycin, Penicillin, Quinidine, Quinine, Losartan, and Cytarabine.**
Others	**Insect bites, Food allergy, Toxocara canis.**
Vaccinations	**Measles, TB, Yellow fever, HB, Influenza, Pneumococcal, Meningococcal, Cholera.**

Pathogenesis of Henoch-Schönlein purpura is not clearly understood,but it is known to be an IgA-complex-mediated disease [12]. IgA is the main immunoglobulin directed against viral and bacterial antigens in the mucosal immune system, and IgA complexes are formed and deposited in the skin, bowel and kidney glomeruli, triggering a localized inflammatory response. Serum concentrations of IgA have been described that Increases in over half of the patients with HSP [13, 14].

The clinical presentation of HSP includes:

: purpura, arthritis and abdominal pain are known as the "classic triad" of Henoch–Schönlein purpura, the clinical features are the following:

1. Skin manifestation

The hallmark of HSP is its rash: palpable purpura caused by small vessel inflammation in the skin leading to extravasations of blood into the surrounding tissues, frequently with IgA deposition.[15] starting as pink macules or wheals and developing into petechiae, raised purpura, or larger ecchymoses. Occasionally, bullae and ulcerations develop. The skin lesions are usually symmetric and occur in gravity-dependent areas (lower extremities) or on pressure points (buttocks), the skin lesions often evolve in groups, typically lasting 3-10 days, and may recur up to 4 mo after initial presentation. Subcutaneous edema localized to the dorsa of hands and feet, periorbital area, lips, scrotum, or scalp is also common [4] .

2. Skeletal

Musculoskeletal involvement, including arthritis and arthralgias, is common occurring in up to 75% of children with HSP [4]. Pain, edema and functional limitation of the joint indicate joint involvement in HSP, which typically affects the lower limb joints

and particularly the ankles and knees. The upper extremity joints may also be affected. Periarticular edema causes functional limitation of the joint, while it is unclear whether HSP can cause synovitis. Although joint involvement can be debilitating, it does not result in permanent deformity [13].

3. Gastrointestinal

Gastrointestinal involvement occurs in about one half of affected children and most typically presents as mild to moderate crampy abdominal pain, thought to be due to small vessel involvement of the gastrointestinal tract leading to ischemia. Less commonly, significant abdominal distention, bloody diarrhea, intussusception, or abdominal perforation occurs and requires emergent intervention. Gastrointestinal involvement is typically seen during the acute phase of the illness. It may precede the onset of rash. [15].

4. Renal

Renal involvement occurs in one third of children with HSP, although renal involvement is mild in most cases, acute glomerulonephritis manifested by hematuria, hypertension, or acute renal failure can occur. Most cases of glomerulonephritis occur within the first few months of presentation, but rarely patients develop late renal disease, which ultimately can lead to chronic renal disease, including renal failure [15]. Progression to end-stage renal disease is uncommon in children (1-2%) [4] The severity of renal squeal is often not related to the severity of other manifestations [17].

5. Urogenital

Scrotal involvement in boys with HSP (IgAV) range from 2 to 38 percent, rarely scrotal pain may be the presenting symptom. Clinical findings include pain, tenderness, and swelling of the involved testicle and/or scrotum.[18] There are anecdotal case reports of urethral stenosis, priapism and penile swelling associated with HSP [19,20].

6. Neurological and others

Central nervous system involvement in HSP is rare. The most common manifestation is headache, followed by subtle encephalopathy with minimal changes in mental status, labile mood, apathy and hyperactivity. Seizures, intracranial hemorrhage, infarction and peripheral neuropathy have also been documented in case reports [21]. Also pulmonary symptoms such as bleeding and interstitial lung disease have been reported in HSP patients. These symptoms are very rare, but can be fatal. [22]
The diagnosis of HSP (IgAV) is usually based upon clinical manifestations of the disease; the purpose of laboratory evaluation is to exclude other diseases and to identify HSP-related complications.

Management of HSP (IgAV) is divided into supportive care, symptomatic therapy, and targeted treatment to decrease the risk of complications. In most cases HSP is mild and self-limiting, requiring only symptomatic treatment. Bed rest and analgesics may be necessary for those with acute arthralgia or abdominal pain. Intravenous fluids may be required in cases of severe abdominal pain and vomiting [23].

Patients and Methods

Sixty five patients with HSP hospitalized in Sulaimaniyah pediatric Teaching Hospital in Kurdistan/ Iraq were included in this retrospective study from 1st of January 2013 to 31st of December 2014; they were selected by case sheets based on the diagnosis of HSP at discharge time.
Patients' data regarding age, gender, season of presentation, address(center or

peripheries), complaints on admission, possible triggering factors, history of abdominal pain ,vomiting and rectal bleeding…etc in addition to clinical examination and some laboratory findings, a questionnaire paper was used for this purpose.

Diagnosis was made clinically by the presence of the typical purpuric rash with maximal distribution over the extensor surface of the legs and buttocks. Clinical examination also concentrated on the presence of joint swelling, edema over the joints, abdominal tenderness and other clinical features.

Investigations send for the patients who were included in this study like. Full blood count and urine analysis were done for all patient. Other investigations like blood urea, serum protein, urinary protein, blood lipid profiles , stool exam, fecal occult blood (FOB), ESR, CRP, serum electrolyte, bleeding time, clotting time, abdominal ultrasound, were done as indicated according to the clinical indications. ASO Titers were done for 3 patients; C3 and C4 were sent for one patient.

Most of the patients were treated symptomatically (rest, analgesia and rehydration) and some patients were treated with other mode of treatment like (steroid and immunoglobulin).

Ethical consideration has been taken in this study , all patient told that they will be included in this study and they gave their agreement.

Statistical analysis

Statistical analyses were conducted using SPSS (version 21) software. Descriptive analyses of percentages of categorical variables were reported.

P-value of less than 0.05 denoted as statistically significant difference in all statistical comparisons.

Results

This is retrospective study from 1st of January 2013 to 31st of December 2014 of sixty five patients; the results as the followings:

1. Epidemiological features

Table: 1 Epidemiological feature of 65 patients diagnosed with HSP

Variables			N	%
Age (year)•	<2 yrs	Male	1	1.5
		Female	1	1.5
	(2-6)yrs	Male	27	41.5
		Female	14	21.5
	> 6yrs	Male	9	13.8
		Female	13	20
Gender	Male		37	57
	Female		28	43
Seasonal distribution	Autumn		16	24.6
	Winter		22	33.8
	Spring		18	27.7
	Summer		9	13.8
Address	Center		39	60
	Periphery		26	40
Possible triggering factors	URTI		24	36.9
	Fever unknown origin		9	13.8
	Gastroenteritis		9	13.8
	UTI		1	1.5
	Chicken pox		1	1.5
	Unknown		21	32.3
Total			65	100

• Mean standard deviation 6.00 ± 2.729 (minimum, maximum) (2, 12) yrs

In this study, the total of 65 (37 male (56.9%) and 28 female (43.1) children were diagnosed as having HSP. The male to female ratio was 1.3:1. Their ages ranged from (2- 12) years, with a mean of 6, and median of 5 years. 3% of patients were less than 2 years of age, 63% were between (2-6) years and 33.9% more than 6 years. Peak incidence of the disease was seen in winter (22/65; 33.8 %) followed by spring (18/65; 27.7%), autumn (16/65; 24.6%), and summer (9/65; 13.8%).thirty-nine (60%) came from the center and twenty-six (40%) came from periphery. Forty-four (67.7%) of patients had a possible triggering factor before HSP onset. Upper respiratory tract infection (URTI) preceded HSP in 24/65 (36.9%) patients, Fever unknown origin in 9/65 (13.8%), gastroenteritis 9/65 (13.8%), one patient (1.5%) had chicken pox, one patient (1.5%) had urinary tract infection and 21/65 (32.3%) had unknown. The main epidemiological features are shown in (Table 1).

2. Skin

Table: 2 Skin manifestations of 65 patients diagnosed with HSP

Variable	Sex				Total	
	Male		Female			
	N	%	N	%	N	%
Lower part of the body involvement*	21	32.30	19	29.20	40	61.5
Lower part and upper part of the body	16	24.6	9	13.8	25	38.5
Total	37	57	28	43	65	100

*Classification of lower part and upper part of the body from the iliac crest.

All patients (100%) had skin rash, distributed mainly over the legs, buttocks, and upper extremities, forty (61.5%) patients were involved lower part of the body, twenty-five (38.5%) patients were involved lower and upper part of the body, as shown in (table 2), but it is not statistically significant (P value=0.36).

3. Skeletal manifestations

Table: 3 Skeletal manifestations of 65 patients diagnosed with HSP

Variable		Sex				Total	
		Male		Female			
		N	%	N	%	N	%
No skeletal involvement		12	18.5	10	15.5	22	34
Skeletal involvement	Ankle swelling	2	3	5	8	7	11
	Wrist swelling	1	1.5	0	.00	1	1.5
	Arthralgia	0	.00	3	4.5	3	4.5
	Leg pain	0	.00	2	3	2	3
	Multiple joint involvement	22	34	8	12	30	46
	Total of skeletal involvement	25	38.5	18	27.5	43	66
Total		37	57	28	43	65	100

Forty-three (66%) patients had skeletal manifestation, 25 (38.5%) were male and 18 (27.5%) were female as show in (Table 3), ankle swelling alone 7/65 (11%), wrist swelling alone 1/65(1.5%), leg pain alone 2/65 (3%) and multiple joint involvement 30/65 (46%) as shown in (figure 1), it is statistically significant (P value=0.02).

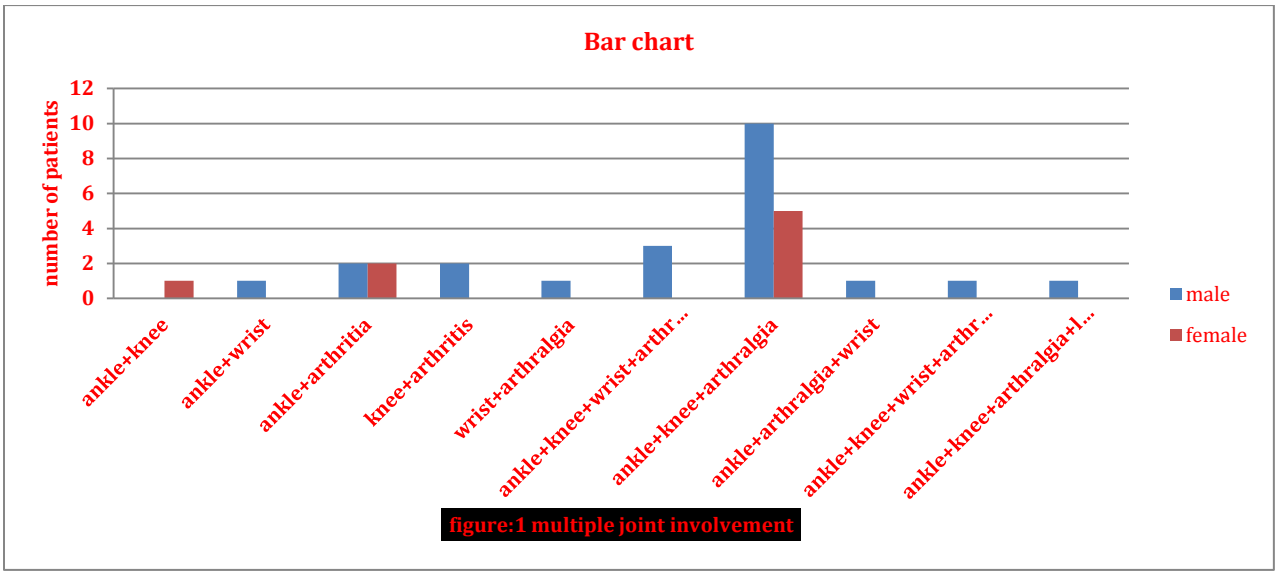

figure:1 multiple joint involvement

4. Gastrointestinal manifestations

Table: 4 Gastro-intestinal manifestations of 65 patients diagnosed with HSP

Variables		Sex				Total	
		Male		Female		N	%
		N	%	N	%		
No GIT involvement		9	13.8	10	15.4	19	29.2
GIT involvement	Abdominal pain(alone)	13	20	3	4.6	16	24.6
	Nausea (alone)	1	1.5	0	.00	1	1.5
	Multiple gastrointestinal features	14	21.5	15	23	29	44.5
	Total of GIT involvement	28	43.1	18	27.7	46	70.8
Total		37	57	28	43	65	100

Forty -six (70.8%) of patients had gastrointestinal features 28 (43.1%) were male and 18 (27.7%) were female, as shown in (Table 4),16/46 (24.6%) had abdominal pain alone, one patient had nausea alone and 29/46 (44.5%) had multiple gastrointestinal features that shown in (figure2) But it is not statistically significant (P value=0.10).

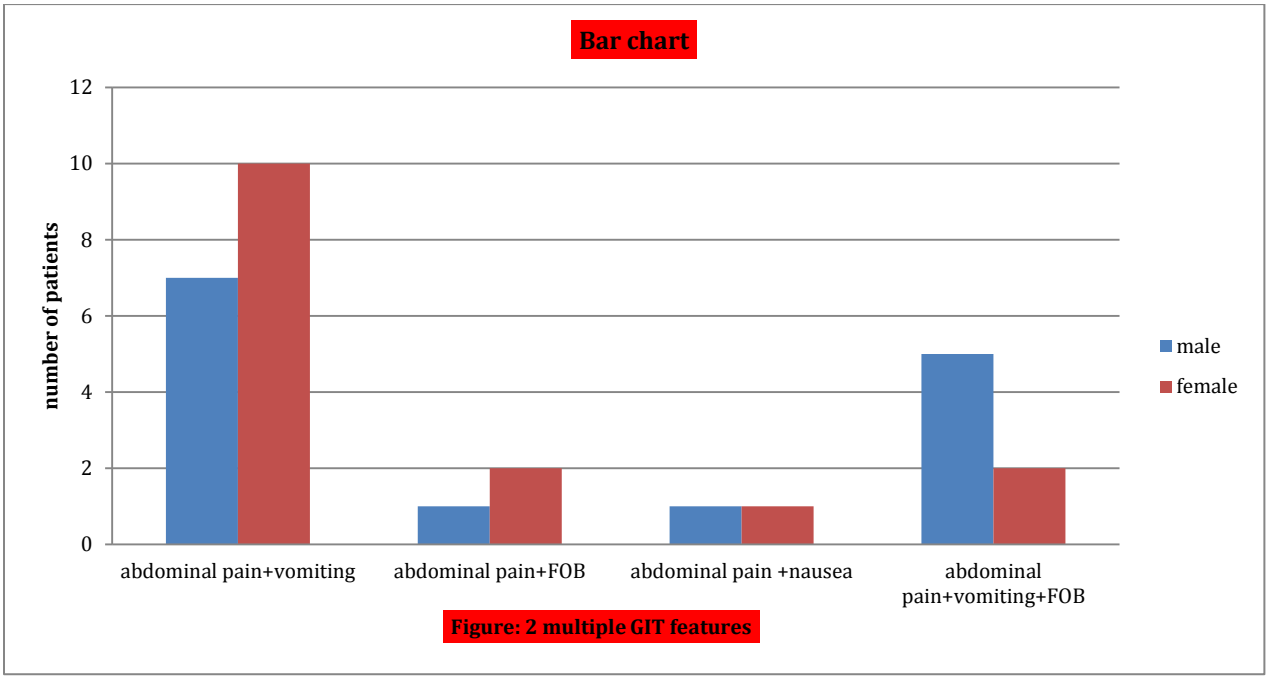

Figure: 2 multiple GIT features

5. Renal manifestation

Table: 5 Renal manifestations of 65 patients diagnosed with HSP

Variable		Sex				Total	
		Male		Female			
		N	%	N	%	N	%
No renal -involvement		27	41.5	21	32.3	48	73.84
Renal involvement	Microscopic hematuria	2	3	1	1.53	3	4.61
	Puss cells in urine	3	4.6	1	1.53	4	6.15
	Urine(RBC+ puss cells)	1	1.53	2	3	3	4.61
	Urine(RBC+ puss cell s+ hydronephrosis)	3	4.6	3	4.6	6	9.2
	Urine(RBC + Puss cells +albumin + hydronephrosis)	1	1.53	0	.00	1	1.53
	Total of renal involvement	10	15.4	7	10.76	17	26.16
Total		37	57	28	43	65	100

Seventeen patients (26.16%) had renal involvement, 10 (15.4%) patients were male and 7 (10.76%) patients were female as shown in (Table 4), but it is not statistically significant (P value=0.83).

6. Genital involvement

Table: 6 Genital involvements of 37 patients male diagnosed with HSP

Variable	Male	
	N	%
No genital involvement	35	94.6
Scrotal swelling and epididymitis	2	5.4
Total	37	100

Two patients (5.4%) of males had scrotal swelling and epididymitis as shown in (Table 6):

7. Laboratory findings

Table: 7 Laboratory findings of 65 patients diagnosed with HSP

Variables		N	%
WBC	>11000	40	61.5
	4500-11000	25	38.5
PCV	<35	24	36.9
	35-45	39	60
	>45	2	3.1
Platelet count	<150000	0	.00
	150000-450000	58	89.2
	>450000	7	10.8
ESR	1-20	20/36	55.5
	>20	16/36	44.5
CRP	Positive	14/28	50
	Negative	14/28	50
U/S	Normal	15/31	48.4
	Cystitis	3/31	9.7
	Mild hydronephrosis	6/31	19.35
	Mesenteric lymphadenitis	5/31	16
	Epididymitis+ scrotal edema	2/31	6.45
GUE	RBC>one + (alone)	3/58	5.2
	Puss cells >one + (alone)	4/58	6.9
	RBC+ puss cells>one+	9/58	15.5
	Albumin +	1/58	1.7
Stool for occult blood	Positive	10/29	34.5
	Negative	19/29	65.5
Aso titer	Increase	0/65	.00
	Normal	3/65	4.6
C3 complement	low	0/65	.00
	Normal	1/65	1.5
Total		65	100

- Leukocytosis >11 x 10^9/L), thrombocytosis >450 x 10^9/L, anemia when PCV<35, Elevated ESR was defined when ESR was >20mm/1hour, microscopic hematuria when urine RBC>+, increased ASO titer when >300IU/mm; low C3 when <900mg/L

Forty(61.5%) patients had Lukocytosis,24(36.9%) patients had anemia,7(10.8%) patients had thrombocytosis,16/36(44.5%) patients were increased (ESR),14/28(50%) patients (CRP)were posative,10/29(34.5%) patients (FOB)were positive,3/58(5.2%) patients had microscopic hematuria alone, 4/58(6.9%) patients had puss-cells in the urine alone, 9/58(15.5%)patients had (RBC and puss-cells) in the urine, just one case had albumin urea, 31(47.7%) patients had ultrasound,15/31(48.4%) patients u/s were normal,3/31(9.7%)patients were cystitis,6/31(19.35%) patients were mild hydronephrosis,5/31(16%) patients had mesenteric lymphadenitis and just 2/31(6.45%)had scrotal swelling and epididymitis),also one patient had C3-comlement but it was in normal range and 3/65(4.6%) patients had ASO titer but all of them in normal range, as shown in (Table 7):

8. Mode of treatment

Table: 8 Mode of treatment of 65 patients diagnosed with HSP

Variables	N	%
Analgesia (alone)	16	24.6
Analgesia +steroid	20	30.8
Analgesia +antibiotics	8	12.3
Analgesia +steroid +antibiotics	20	30.8
Analgesia +steroid +antibiotics +IVIG	1	1.5
Total	65	100

In this study most patients were treated by (analgesia +steroid) 20(30.8%) and 20(30.8%) (analgesia +steroid +antibiotics), followed by analgesia alone 16(24.6%), 8(12.3%) treated with (analgesia +antibiotics), only one case treated by (analgesia + steroid +antibiotics +IVIG) as shown in (Table 8):

Discussion

Henoch-Schonlein purpura is the most common vasculitis in the world. It is an acute immunoglobulin A (IgA) mediated disorder characterized by a generalized vasculitis involving the small vessels of the skin, the gastrointestinal tract, the kidneys, the joints, and rarely the lungs and the central nervous system (CNS).

In our study, 65 patients with HSP were evaluated in terms of their epidemiologic, clinical characteristics and their findings were compared with those reported from Mosul, Saudi Arabia, Turkey and other countries.

In our study The mean age was 6.00 ± 2.729 years (range 1-12 years),this result in agreement with the result done in Mosul (Rabei M. EL-Dubooni)[24], in Saudi Arabia(Amer A. Lardhi)[25], Florence Italy (Trapani et al.)[26], Luga Spain (Calvino et al.)[14], and Virginia USA (Saulsbury et al) [13] but disagree with the studies done in Turkey (7.9±2.9) (Anıl et al.)[27], (7.1±3.3) (İnal et al.)[28], (7.4±3.4) (Aslan Yılmaz et al) [29] and in Oulu Finland (7.1±3.5) (Jauhola et al.)[30], the peak age between (2-6 years), it has been mentioned in most of text books.

In this study the male more affected than female, the male to female ratio was (1.3:1),this result in agreement with the results done in Mosul(Rabei M. EL-Dubooni)[24] , Saudi Arabia(Amer A. Lardhi)[25],(İnal et al.)[28], Aslan Yılmaz et al [29], Virginia USA (Saulsbury et al) [13] and in Oulu Finland (Jauhola et al.) [30], this information was mentioned in most of the text books, but disagree with the study was done in Luga Spain (Calvino et al.)[14] More common in female than male (0.85).

Peak incidence of the disease most frequently seen in Winter and less frequently in the Summer ,the same in (Aslan Yılmaz et al)[29],Virginia USA(Saulsbury et al)[13] and Italy (Trapani et al.)[23], but not the same in other studies like in Saudi Arabia (Amer A. Lardhi) [25], Turkey (Anıl et al.)[27] and Luga Spain (Calvino et al.)[14] The peak incidences most frequently seen in autumn. Also in Turkey (İnal et al.)[28] The peak incidence occurred in spring, these variations may be due to differences in environmental conditions that affecting the presence of triggering factors.

The etiology of the disease is unknown, but it may be triggered by some factors. In our study the most possible triggering factor was (URTI) 24(36.9%), this result agreement with results done in Mosul(Rabei M. EL-Dubooni)[24], in Saudi Arabia(Amer A. Lardhi)[25],Turkey(İnal et al.)[28], Virginia USA (Saulsbury et al) [13] and Italy (Trapani et al.)[23], Oulu Finland (Jauhola et al.)[30] and Luga Spain (Calvino et al.)[14].

All patients in our study 65(100%) had skin manifestations and same result seen in the studies done in Mosul(Rabei M. EL-Dubooni)[24],Saudi Arabia(Amer A. Lardhi)[25],Turkey(İnal et al.)[28], Turkey (Anıl et al.)[27] Virginia USA (Saulsbury et al) [13] and Italy (Trapani et al.)[23], Oulu Finland (Jauhola et al.)[30] and Luga Spain (Calvino et al.)[14].It is well known that skin manifestation found in 100% of the patients.

In this study 46(70.8%) of patients had gastrointestinal involvement, near results found in Turkey (Aslan Yılmaz et al)[29],Luga Spain (Calvino et al.)[14] .but other studies showing different results like (Mosul(90.47%)(Rabei M. EL-Dubooni)[24],Saudi Arabia(47%)(Amer A.Lardhi)[25],Turkey(60%)(İnal et al.)[28], Turkey (34%) (Anıl et al.)[27], USA (60%) (Saulsbury et al)[13], Italy (51%) (Trapani et al.)[23] and Oulu Finland (57%) (Jauhola et al.)[30].It may be associated with side effects of drugs that used in treatment of HSP like (NSAIDs).

Forty-three (66%) patients had skeletal manifestations mostly ankle and knee involvement, closer percentage found in Mosul (Rabei M. EL-Dubooni) [24], Saudi Arabia(Amer A. Lardhi)[25],Turkey(İnal et al.)[28], Turkey (Aslan Yılmaz et al)[29] and Virginia USA(Saulsbury et al)[13].but higher percentage found in (Luga Spain(78%) (Calvino et al.) [14], Oulu Finland (90%) (Jauhola et al.) [30].

In this study 17(26.16%) had renal involvement, nearly similar were found in Saudi Arabia(Amer A. Lardhi)[25]and Turkey(Aslan Yılmaz et al)[29] ,but differ with studies done in Mosul(35.11 %)(Rabei M. EL-Dubooni)[24], Luga Spain(54%) (Calvino et al.)[14], Italy (54%) (Trapani et al.)[23]. the rate of renal involvement in HSP varies between 20% and 60% in different studies [31].

Testicular involvement in our study were (2 in 37 male) (5.4 %), nearly similar were found in Turkey (İnal et al.)[28], Turkey (Anıl et al.)[27],USA(Saulsbury et al)[13],but not the same with results in Saudi Arabia

(7 in 46 male)(15%)(Amer A. Lardhi)[25], Turkey(13 in 90 male)(14%)(Aslan Yılmaz et al)[29],Italy(23 in 114 male)(20%)(Trapani et al.)[23] And Oulu Finland (17 in 122 male) (14%) (Jauhola et al.)[30].All results range between (2 to 38 percent); it has been mentioned in urogenital involvement.

The laboratory tests usually help in excluding other diseases and in evaluating renal function, but are not diagnostic for HSP, our data show increased ESR in (16 of 36 patients)(44%) agreement with (Trapani et al)[23] and Saudi Arabia(Amer A. Lardhi)[25], increase CRP in (14 of 28 patients)(50%),leukocytosis in (61.5%), these are may be increase in any inflammatory condition, anemia (36.9%) disagree with Saudi Arabia(Amer A. Lardhi)[25],it may be related with GIT involvement rather than other conditions, thrombocytosis in (10.8%) agreement with (Saudi Arabia(Amer A. Lardhi)[25],no any patients had thrombocytopenia, just some cases had thrombocytosis ,it has been mentioned in text books, fecal occult blood positive (10 in 29 patients)(34%) near results in Turkey(İnal et al.)[28],(Aslan Yılmaz et al)[29],(Perue et al)[32] and USA(Saulsbury et al)[13] ,but disagree with results of the following studies (Luga Spain(15%)(Calvino et al.)[14], Italy (20%) (Trapani et al.)[23] and Oulu Finland (22%).

(Jauhola et al.)[30], it may be related with more using (NSAIDs) in treatment of HSP patients rather than related with this disease.

In our study renal function tests were sent for 35 patients, all of them were normal; rarely patients develop renal failure it has mentioned in most text books.

In this study ASO titer were sent for few cases, all of them were normal, this result disagree with (Trapani et al.)[23] Were increased ASO titers in half of patients (54 in 108 patients)(50%),also in Saudi Arabia (Amer A. Lardhi)[25] ASO titers increased in (11 of 24 patients)(45.8%) ,this is support that in our country most infections are viral infections, but in others, Streptococcus is a common cause of (URTI).

In our study the patients treated in different ways (20 of 65 patients)(30.8%) treated by (analgesia+ steroid), (20 of 65 patients)(30.8%) treated with (analgesia+ steroid+ antibiotics),(16 of 65 patients)(24.6%) treated with analgesia alone, in other studies the treatment were different for example in (Trapani et al.) [23] NSAIDs were administered in 15% of children, who complained of severe arthralgias or arthritis, and OCS were used in 12% of patients, who suffered from severe abdominal pain or renal involvement, and in Saudi Arabia (Amer A. Lardhi) [25] most of the patients with HSP require no treatment other than supportive measures, just ten (13%) patients received steroid for GI and renal involvement.

Conclusion

From the results we can conclude the following points:

1. There were no major differences in the epidemiological and clinical features of HSP in Sulaimaniyah with that most of similar studies done elsewhere.
2. The diagnosis of HSP in our study mostly based on clinical findings.
3. Children in this study had more GIT involvement than arthritis. Those who developed renal involvement had mostly asymptomatic microscopic hematuria.

4. HSP patients could have various clinical symptoms and quite rare complications in our locality.
5. Many patients had been treated with (antibiotics, steroid, analgesia), while the scientific treatment better to be only simple analgesia, bed rest and rehydration with treatment of complications if they developed.

Recommendation

1. Patients who are possible to have HSP better to be seen by pediatrician to avoid wrong diagnosis or wrong management.
2. Education of the public about the disease and it is complications in order to be aware about the disease and to enhance cooperation between parents and the medical staff for better outcome.
3. Steroids are a possible line of treatment in HSP (still questionable) but they are better not be used routinely if not indicated, because of their side effects.
4. To identify patients who may develop renal involvement later on, we recommend a follow up screening tests like (urinalysis, renal function and blood pressure measurements) by the out patients clinics during subsequent well-child visits or by the pediatrician follow up examination.

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مرض فرفورة هينوخ عند الاطفال بين ١-١٢ عام في مدينة السليمانية \ العراق

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أسس وخلفية الدراسة: فرفرية هينوخ هو مرض حاد ينتج من توسط الكلوبين المناعي نوع A ويتصف بالتهاب الاوعية الدموية العام والذي يصيب الاوعية الدموية الصغيرة خاصة في الجلد والجهاز الهضمي والبولي والمفاصل ونادرا ما يصيب الجهاز التنفسي والعصبي

أهداف البحث: لتسليط الضوء على هذا المرض والذي يعتبر من الامراض الشائعة نوعا ما في مدينة السليمانية ولمعرفة خصائص وصفات المرض الوبائية والسريرية والمختبرية ومضاعفات المرض ولمعرفة طرق العلاج المستخدمة من قبل اختصاصيي الاطفال في مدينة السليمانية لتوحيد علاج هذا المرض باسس علمية صحيحة.

المرضى وطرق البحث: خمسة وستون مريضا مصابين بفرفرية هينوخ ادخلوا الى مستشفى السليمانية التعليمي للأطفال تم أدراجهم بهذه الدراسة الأستعادية من تاريخ الأول من كانون الثاني لعام ٢٠١٣ ولغاية الحادي والثلاثون من كانون الاول للعام ٢٠١٤ وتم اختيارهم أعتمادا على التشخيص السريري الموثق في سجلات المستشفى عند تخريجهم.

النتائج: سبعة وثلاثون (٥٧%)من المرضى كانوا ذكورا و٢٨ (٤٣%)كانوا من الأناث مع نسبة الذكور للاناث بمقدار (١,٣:١) . أعمار المرضى كانت تتراوح ما بين سنتين الى اثني عشر سنة مع معدل عمر بمقدار ٦سنوات. تقريبا ٦١% من الحالات قد ظهرت خلال الشتاء والربيع.
من المرضى قد أصيبوا مسبقا بالتهابات الجهاز التنفسي العلوي الحاد.(١٠٠%) من المرضى (36,9%)
ظهرت عليهم علامات المرض الجلدية اما علامات المرض الهيكلية فظهرت ب(٦٦%) من المرضى (70,8%) من المرضى قد ظهرت عليهم علامات المرض في الجهاز الهضمي و(٢٦,١٦%)
لعلامات الجهاز البولي و (٥,٤%) لعلامات الجهاز التناسلي في الذكور .فحص البراز لكريات الدم الحمراء نتيجة النزف المعوي البسيط كان موجبا ب (١٠ مرضى من اصل ٢٩ مريض اجري لهم هذا الفحص اي (٣٤،٥%) .

واحد واربعون مريض تم استخدام مركبات الستيرويد في علاجهم.

الاستنتاجات: ليس هناك فروقات كبيرة في صفات المرض الوبائية والسريرية والمختبرية في السليمانية عن باقي مناطق العالم الأخرى. ظهر في الدراسة ان اصابة الجهاز الهضمي في هذا المرض اكثر من اصابة الجهاز الهيكلي.

معظم المرضى في هذه الدراسة تم استخدام مركبات الستيرويد في علاجهم.