

## Case Report

# Massive Pleural Effusion as A Presenting Feature of SLE : A Diagnostic Challenge

Biswajit Mondal<sup>1</sup>, Asha Mukherjee<sup>2</sup>, Suparna Guha<sup>3</sup>, Sadhna Sha<sup>4</sup>, Guruprasad H.S.<sup>5</sup>

### Abstract :

Large volume pleural effusions as a presenting feature of Systemic Lupus Erythematosus (SLE) may present a diagnostic and therapeutic challenge. Exudative and transudative aetiologies are both possible as well as co-existing infectious causes. Multiple aetiologies may also be found contributing to the effusion in the same patient. The optimal therapeutic modality is not clearly established. We hereby present a case report of a 9 year old male child, illustrating these dilemmas and briefly discuss the learning points therein.

### Keywords :

Systemic Lupus Erythematosus, Pleural effusion

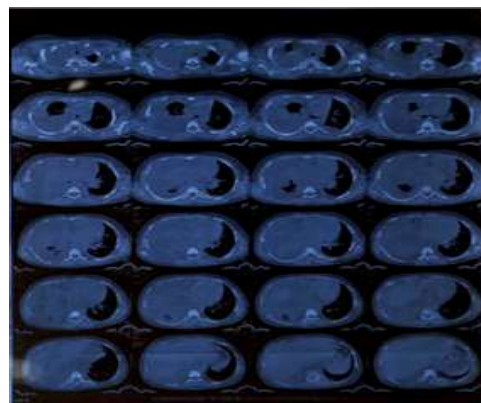
### Introduction :

Serositis is a common feature of SLE. However, large volume effusion occurring as a manifestation of active SLE is rare. This finding can lead to a diagnostic dilemma as it may represent an inflammatory exudative effusion due to serositis, a coexisting infection which may be pyogenic or tubercular or have a transudative aetiology due to complications of SLE like constrictive pericarditis or heart failure due to hypertension from renal involvement<sup>[1,2]</sup>. Hereby we present a 9 years old with SLE with such a diagnostic and therapeutic conundrum.

### Case Description :

A 9 year old male child presented with fever of

1 month duration and swelling of the entire body for 5 days. He had a history of multiple skin lesions that started over the malar area with sparing of the nasolabial fold for the past 6 weeks which progressed to the abdomen and extremities. He was admitted elsewhere, and lupus was suspected, but he was also found to have a right sided consolidation and effusion, hence received antibiotics before transfer to our institute. At admission the positive findings included a malar rash with erythematous plaques over the trunk and limbs, pallor and anasarca. There were clinical findings suggestive of a right sided consolidation, pleural effusion and hepatomegaly. Investigation established a diagnosis of SLE, with massive right sided pleural effusion and patchy consolidation, along with Grade III A nephritis.



**HRCT showing right sided Massive pleural effusion**

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**Investigations :**

Hb	7.1	Sr ANA	185
TC	15200 (N90,L6)	Anti ds DNA	450
plt	404000	C3	17.3
CRP	44.3	C4	4.5
procal	0.15	DCT	3+
U pr:cr	3.04	PI fl ANA	<b>1:640</b>
ALT	67	Retic ct	1.5
AST	56	alb	2.3

**ECHO - Mild pericardial effusion****APLA - Negative**

Immune suppression was commenced with hydroxy chloroquine and oral corticosteroids at 1.5mg/kg daily. Though consolidation changes were present on the CT scan, preliminary investigations did not suggest bacterial infection, possibly due to prior treatment with antibiotics. All cultures were negative (blood, pleural fluid). The factors contributing to pleural effusion included serositis, infection and hypo-albuminemia. In view of the lymphocyte predominant effusion an extensive tuberculosis workup was done but was negative. As the respiratory compromise needed HFNC support and there was non-resolution of effusion with a week of antibiotic therapy, an intercostal drain was inserted, draining 700 ml on day 1 with persistent drainage (150-200ml) on a daily basis. With these findings persistent pleural effusion was thought to be due to serositis, and steroid therapy was escalated to pulse methyl prednisone followed by 2 mg/kg/day of IV methyl-prednisolone, due to concerns about oral absorption in view of presumed gut oedema. With these measures there was a gradual

reduction in pleural fluid drainage to less than 20ml / 24 hours over a period of 8 days after which the drain was removed.

A renal biopsy revealed class 3 lupus nephritis. Hypertension was present requiring multiple antihypertensive medications (enalapril, amlodipine, prazosin). The child was discharged after 26 days in hospital, with oral corticosteroid therapy, hydroxychloroquine and mycophenolatemofetil.

**Discussion :**

Pleuro-pulmonary involvement occurs commonly in childhood onset SLE (cSLE) with 7-75% of patients being affected as per case series<sup>[3]</sup>. Pleural involvement is the most common pulmonary manifestation of SLE (30 % of patients with cSLE). Pleural effusion may also be the sole presentation of SLE in a small number of cases (5%)<sup>[4]</sup>. In some autopsy series, pleural effusions have been found in 93% of cases.

**Aetiology :**

The majority of patients with cSLE may develop pleural effusion as part of serositis, resulting from pleural inflammation, and this is often bilateral and exudative in nature<sup>[1]</sup>. However we should evaluate for the presence of life threatening causes of pleural effusion such as infection, CCF, AKI, pulmonary embolism and malignancy. An acute cardiac diagnosis leading to CCF due to myocarditis, pericarditis, valvular insufficiency or endocarditis may be present in up to 17.8% of cSLE and may also lead to pleural effusion<sup>[5]</sup>. Renal involvement leading to AKI causing fluid overload may be a cause.

Effusion may accompany pulmonary embolism and malignancy as well. Apart from the above, anti TNFa medications and antihypertensives like hydralazine may cause drug induced pleuritis.

**Pathogenesis :**

Pleural inflammation leading to increased vascular permeability and decreased absorption of pleural fluid contributes to effusion. Local autoimmune complex depositions, production of pro inflammatory cytokines, compliment activation and direct binding of anti dsDNA antibodies to the mesothelium have also been postulated as cause<sup>[6,7]</sup>.

**Clinical Presentation :**

Fever, cough, dyspnoea, pleuritic chest pain.

**Laboratory Features :**

Appearance of effusion - yellow or serosanguinous. Elevated levels of protein and LDH with normal glucose levels<sup>[1]</sup>. Cell count 200-15000/cmm with either neutrophilic or lymphocytic predominance. Lupus erythematosus (LE) cells may be found in the pleural fluid. A higher proportion of pleural ANA positivity is found in lupus pleuritis. It is more sensitive than specific. A titer of = 1:160 may differentiate lupus pleuritis from other causes<sup>[8]</sup>. Along with

this criterion, homogeneous pleural fluid ANA staining patterns and pleural fluid to serum ANA titre ratios =1 may also point to the diagnosis. C3, C4 levels are both found to be low in lupus pleuritis.

**Treatment :**

NSAIDS and a short course of oral steroid or, in resistant cases, pulse methyl prednisolone. ICD may be rarely required. In chronic lupus pleuritis, not responding to medical therapy, local therapy may be resorted to. These options, with very limited pediatric experience include intrapleural steroid injections, pleurodesis with talc or tetracycline and as a last resort pleurectomy.<sup>[9]</sup>

**Conclusion :**

Large pleural effusions with SLE may be occasionally present and cause diagnostic and therapeutic dilemmas and need to be differentiated from infective causes. Pulse methylprednisolone may be helpful to resolve the serositis once infection is ruled out.

**References :**

1. Yao X, AbdHamid M, Sundaralingam A, Evans A, Karthikappallil R, Dong T, Rahman NM, Kanellakis NI. Clinical perspective and practices on pleural effusions in chronic systemic inflammatory diseases. *Breathe* (Sheff). 2020 Dec;16(4):200203.
2. Amarnani R, Yeoh SA, Denny EK, Wincup C. Lupus and the Lungs: The Assessment and Management of Pulmonary Manifestations of Systemic Lupus Erythematosus. *Front Med (Lausanne)*. 2021 Jan 18;7:610257.
3. Dai G, Li L, Wang T, Jiang W, Ma J, Yan Y, Chen Z. Pulmonary Involvement in Children With Systemic Lupus Erythematosus. *Front Pediatr*. 2021 Feb 2;8:617137.
4. Harvey AM, Shulman LE, Tumulty PA, Conley CL, Schoenrich EH. Systemic lupus erythematosus: Review of the literature and clinical analysis of 138 cases. *Medicine*. 1954; 33(4):291.
5. Chang JC, Xiao R, Mercer-Rosa L, Knight AM, Weiss PF. Child-onset systemic lupus erythematosus is associated with a higher incidence of myopericardial manifestations compared to adult-onset disease. *Lupus*. 2018 Nov;27(13):2146-2154.
6. Palafox-Flores JG, Valencia-Ledezma OE, Vargas-López G, Jamaica-Balderas L, Acevedo-Silva N, Castro-Fuentes CA. Systemic lupus erythematosus in pediatric patients: Pulmonary manifestations. *Respir Med*. 2023 Dec;220:107456.
7. Kriegel MA, Van Beek C, Mostaghimi A, Kyttaris VC. Sterile empyematous pleural effusion in a patient with systemic lupus erythematosus: a diagnostic challenge. *Lupus*. 2009 Jun;18(7):581-5.
8. Choi BY, Yoon MJ, Shin K, Lee YJ, Song YW. Characteristics of pleural effusions in systemic lupus erythematosus: differential diagnosis of lupus pleuritis. *Lupus*. 2015 Mar;24(3):321-6.
9. Breuer GS, Deeb M, Fisher D, Neshor G. Therapeutic options for refractory massive pleural effusion in systemic lupus erythematosus: a case study and review of the literature. *Semin Arthritis Rheum*. 2005 Apr;34(5):744-9.

## Abstracts

### Abstracts from The 36th Annual Scientific Conference of The Ramakrishna Mission Seva Pratishthan Vivekananda Institute of Medical Sciences, November, 2024

#### Outcomes of Medialisation Thyroplasty in Unilateral Vocal Fold Paralysis

Debojyoti Dasgupta

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**Background :** Unilateral Vocal fold paralysis presents with hoarseness and/or aspiration. Medialisationthyroplastyis a surgical procedure that aims to correct glottic incompetence and thereby restore voice.

**Aim :** To evaluate the change in voice quality in patients with unilateral vocal fold paralysis after undergoing type1thyroplasty.

**Methodology :** Preoperative assessment of voice with F0 (mean:190.75), GRBAS, Maximum phonation time (mean: 9.7 sec), VHI 10 (mean: 7.5 with 0.85SD), and loudness (mean 43.25dB) and glottic gap on fibreoptic laryngoscopy in 4 patients presenting with unilateral vocal fold paralysis was done. Each of these patients underwent contrast enhanced imaging of the

larynx in order to rule out any organic causes of unilateral vocal fold paralysis. 100 percent of these patients underwent medialization thyroplasty (ELS Classification) with custom based silicone in the thyroid cartilage through a perichondrial window. Post operative voice assessment done on 0,3 and 6 weeks by measuring F0 (mean:241.75), GRBAS, MPT (mean 22.4 sec), QOL questionnaire VHI 10 (mean: 3.2 with 1.2SD) and loudness (mean:70.45), and glottic gap closure on fibreoptic laryngoscopy.

**Conclusion :** Type 1 thyroplasty brings about satisfactory improvement of voice and loudness with excellent patient satisfaction evaluated on QOL VHI.

#### Endoscopic Orbital Decompression for Grave's Ophthalmopathy – Our Experience

Moumita Sen

Senior Resident, Department of ENT Head Neck Surgery

**Aim :** To document surgical outcome of endoscopic orbital decompression in cases of thyroid ophthalmopathy.

**Methodology :** A totalof four patients of thyroid ophthalmopathy underwent endo-nasal endoscopic decompression of the medial orbital wall between May 2023 and August 2024, in the Department of ENT and Head-neck Surgery. All

the 4 patients wererefractory to medical treatment for ophthalmoplegia. Pre-operative and post-operative VEP, free field optometry, tests for visual acuity and colour vision were documented and compared, both before and after the surgical interventions.The outcome measures were adjudicated in terms of improvement ofproptosis and eye movements.

**Results :** All the patients had significant improvement of proptosis and ocular movements after surgery. Complete eye closure at rest was also documented in the post operative period. There was minimal post-operative pain & crust formation with no history of epistaxis. No

periorbital ecchymosis or nasalsynaechiae developed during follow up.

**Conclusions :** Endo-nasal endoscopic approach for medial wall decompression of the orbit in thyroidophthalmopathy is a safe procedure with significant functional outcome.

## **An Unusual Case of Squamous Cell Carcinoma of Palate**

**Imon Das Gupta**

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**Background :** Oral cancer is one of the three commonest types of cancer in India. The age-adjusted rate of oral cancer in India is 20 per 100,000 population; it accounts for over 30% of all cancers in the country.

**Aim :** We present an interesting case which presented several challenges in management.

**Methodology :** The decision making with regard to management was complicated at each stage, requiring intense discussion in the Joint Clinic.

**Conclusion :** The case is illustrative of the need for discussion of complicated Head Neck patients by a multidisciplinary team at each stage of management.

## **Multimodal Imaging Profile in Acute Posterior Multifocal Placoid Pigment Epitheliopathy**

**Sipra Barman**

*Junior Resident, Dept. of Ophthalmology*

**Abstract :**

- **Introduction :** Acute posterior multifocal placoid pigment epitheliopathy (APMPPE) is a rare inflammatory disease of the spectrum of the white dot syndromes, first described by Gass in 1968
- **Aims and objective :** Multimodal imaging have been important in understanding of the pathophysiology of the disease, allowing a better characterization of the morphology of this condition.

- **Methods :** narrative

- **Results :** A 22-year-old female presented with sudden painless onset of blurring of vision in both eyes for 7 days. Ophthalmological examination showed yellowish-white placoid lesions at the RPE in the posterior pole. Optical coherence tomography shows hyper-reflective outer retina with disruption of ellipsoid zone and bacillary layer detachment, Optical coherence tomography angiography shows abnormalities

in choriocapillary flow, Fundus fluorescein angiography shows early hypofluorescence corresponding to the placoid lesion followed by late, hyperfluorescent staining leading to the diagnosis of APMPE. It's a rare self-limiting inflammatory condition, affecting

the inner choroid and the outer retina.

- **Conclusion :** Multimodal imaging played a key role in the characterisation of disease phenotype, and advances in imaging technologies have resulted in a better understanding of its pathophysiology.

## A Case of Unilateral Parainfectious Optic Neuritis – Diagnosis and Management

Alokan Sengupta, Vivek Dutta

Junior Resident, Dept. of Ophthalmology

**Background :** Optic neuritis may be associated with viral infections like measles, mumps, chicken pox, rubella etc. The usual time of presentation is generally 1-3 weeks after a viral infection. The patient usually presents with bilateral papillitis. Occasionally there may be neuroretinitis. We present a case of a middle-aged male who presents with unilateral optic neuritis after suffering from a viral infection.

**Method :** A 52 year old male presented with painless loss of vision in his left eye 3 weeks after suffering from viral fever. Visual acuity in his right and left eyes were 6/9 and 6/36 respectively. IOP was normal with mild anterior uveitis in left eye. There was left eye RAPD. Fundus examination of left eye revealed papillitis and serous macular detachment. OCT macula

and OCT RNFL showed optic nerve head swelling and macular subretinal fluid. Treatment with oral steroids and topical NSAIDs was commenced.

**Result :** Over a period of 4 weeks, the visual acuity in his left eye gradually improved to 6/18. A repeat OCT macula and OCT RNFL showed resolving optic nerve head swelling and decreased macular subretinal fluid. The patient was asked to follow up after 3 weeks.

**Conclusion :** Parainfectious optic neuropathy is more frequently seen in children compared to adults. In our case the patient, who was a middle aged adult male, had moderately severe unilateral visual loss without any other neurological features. The patient responded favourably to oral steroids.

## Hyphema After Schiötz Tonometry following Uneventful Cataract Surgery

Sweta Bhowal

Junior Resident, Dept. of Ophthalmology

Sudden appearance of hyphema after a routine Schiötz tonometry procedure in a busy Rural Hospital Eye OPD is an unlikely event. Nevertheless, considering it has occurred, the predisposing factors should be investigated and

could be due to sympathetic overdrive, strenuous conditions, valsalva manoeuvre, blood dyscrasias, neovascularisation of iris or at the angle of the anterior chamber, inflammatory conditions, post intraocular procedures, medications and trauma.

We present a case where such a situation arose in a rural setup during District postings. The patient was called to a higher centre for evaluation where no apparent cause could be appreciated, so by exclusion of all other causes, it was taken into consideration that incomplete healing of wound lead to the mishap following instrumentation. He was diagnosed with advanced optic atrophy of right eye with

progressive disc changes in left eye following all investigations.

#### **Clinical Implications :**

Though a very rare occurrence, it is best to use any instrumentation cautiously over ocular surface after any ocular surgery to avoid mishaps. The need for awareness amongst healthcare providers and patients for early and regular checkups to prevent visual debilitation is vital.

### **Ovarian Fibroid-incidental Diagnosis of A Rare Entity**

**Hadikul Sk.**

*Junior Resident, Department of Obstetrics and Gynaecology*

**Guide - Prof. Sajal Datta, Dr. Babita Saha**

Mrs. Aruna Devi, a 43-year-old woman, presented with irregular, frequent, and heavy vaginal bleeding for the past 4-5 months, along with passage of clots. She had no abdominal pain. Her last menstrual period was on 14.03.23. She has a history of hypothyroidism, controlled with levothyroxine, and has been using combined oral contraceptive pills for cycle regularization. Gynecological examination revealed a firm, non-tender, 12-14 week-sized mass in the pelvis, palpable through the posterior fornix. Ultrasound indicated a large (97x89 mm), complex cystic mass in the left adnexa, likely ovarian in origin. CA 125, CEA, LDH, AFP, and Beta HCG levels were within normal limits. A CT scan suggested a uterine fibroid (12x6 cm) with external compression of the right ureter.

Laparotomy revealed a bulky uterus with a small fibroid and a large, variegated mass in the left ovary, which was impacting the pouch of Douglas. A total abdominal hysterectomy with bilateral salpingo-oophorectomy was performed. Histopathology of the left ovarian mass showed features consistent with a leiomyoma, with spindle cells and dilated vascular spaces, without evidence of malignancy. No mitotic activity or necrosis was noted. The native ovary was replaced by leiomyoma.

This case represents a rare primary ovarian tumor, diagnosed incidentally as leiomyoma after histopathological examination. Differential diagnoses included other solid ovarian tumors, with immunohistochemistry helpful in confirming the final diagnosis.

## Secondary Infertility with Intrauterine Foetal Skull

Farmina Siddiqua

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Infertility is defined as inability to conceive even after 1 year of unprotected intercourse. Secondary infertility defined as infertility in a couple whom already had at least one pregnancy between them irrespective of the result of the pregnancy. The cause of secondary infertility can be traced to either partner.

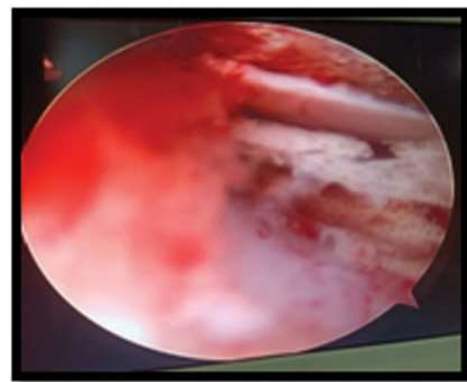
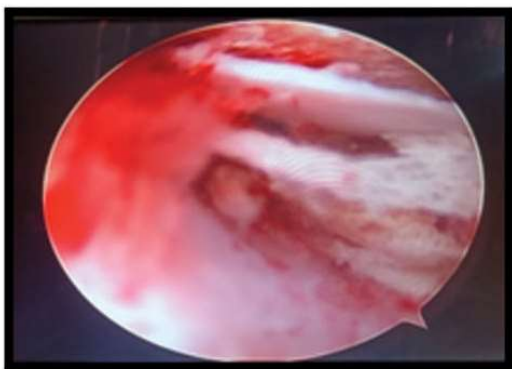
33 years P1+1 female came to OPD complaining of inability to conceive last 3 years. She had history of one vaginal delivery 7 years ago and D and E 4 year ago. Her menstrual cycle was regular, lasting for 2 to 3 days, bleeding average, no history of dysmenorrhoea. There was no history of galactorrhea. Her husband was non smoker and non alcoholic.

All routine blood investigation was done which came out normal. Transvaginal ultrasound was done, report shows bulky uterus with a linear echogenic focus (1.69cm) seen within uterine cavity (? nature /IUCD) with cystic ovaries. There is no history iucd insertion and unaware of the fact of iucd insertion in previous D&E operation. Pervaginal examination was done and

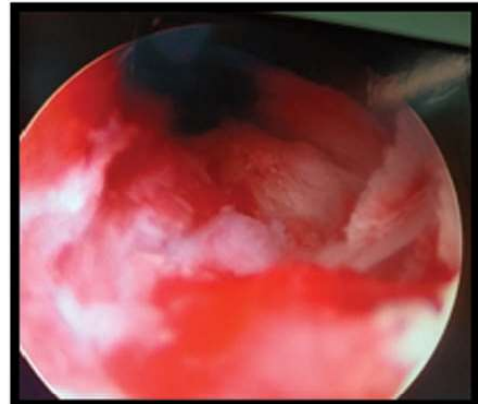
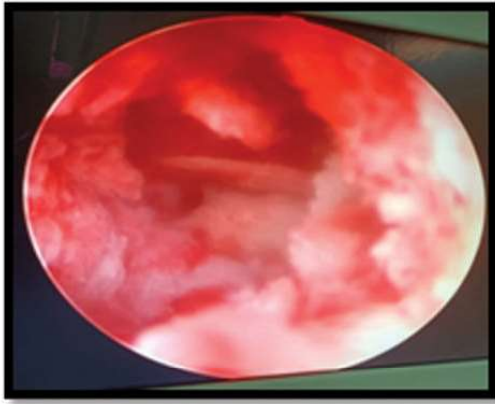
no thread was seen coming through the os. Hysterosalpingography was done and uterine cavity was normal in size and shape, right tube partially fills with no spillage and left tube does not fill.

Diagnostic laparohysteroscopy f/b chromopertubation was planned and on hysteroscopy uterine cavity was filled with whitish foreign material (? foetal bone), both Ostia could not be visible due to foreign body and on chromopertubation bilateral tubes conglomerated and no spillage of dye noted. Whitish foreign material (? Foetal bone) sent for HPE and report showing proliferative endometrium along with plenty of bits of calcified material.

Diagnostic laparohysteroscopy have great importance in diagnosing secondary infertility. It's considered the gold standard for evaluating and managing intrauterine pathology. Hysteroscopy should be a part of routine work in the evaluation of infertile women.



Before Hysteroscopic Removal of Foreign Body



**After Hysteroscopic Removal of Foreign Body**

## **Management of Posterior Interosseous Nerve Palsy in A Post-operative Case of Plating Done for Proximal 1/3<sup>rd</sup> Both Bone Forearm Fracture**

**Sandipan Bhattacharya**

*Junior Resident, Department of Orthopedics*

**Introduction :** Posterior interosseous nerve palsy is a known complication after a both bone plating operation after fracture of both bone forearm. Detailed examination evaluation proper surgery and adequate post operative rehabilitation can reduce morbidity and regain motor and sensory function of the patient.

**Case Summary :** A 26 years old male patient, a student, from a low socio economic background visited our OPD on 25<sup>th</sup> March 2024 with complaint of inability to extend his right index finger, middle finger and thumb fully and not having a firm grip.

**Past Surgical History :** Right proximal 1/3<sup>rd</sup> forearm plating back in March, 2022.

**On Examination :** He had inability to extend his right index finger, middle finger and right thumb.

There was no sensory deficit over his right forearm or dorsum of hand.

Tinel's sign was positive till mid right forearm. Right wrist dorsiflexion was unaffected.

Sufficient time elapsed since date of primary surgery for regeneration of neuromuscular end plate, therefore, a tendon transfer surgery was done on 27<sup>th</sup> March 2024.

Follow up after two weeks showed Range of extension substantially increased.

**Conclusion :** While operating on proximal 1/3<sup>rd</sup> forearm, proper care and attention to be given while retraction.

Forearm to be pronated fully while operating. To wait for sufficient time before operating again for tendon transfer (11-12 months), the time required for regeneration of neuromuscular motor end plate.

## A Case Series of Post Infectious Glomerulonephritis in Adults in Atertiary Care Hospital in Kolkata

Subham Mondal, Santa Subhra Chatterjee, Sandipan Mukherjee

Department of General Medicine

**Introduction :** Post infectious glomerulonephritis occurs commonly secondary to infection & presents as nephritic syndrome.

**Objectives :** To study various clinical manifestation, prognosis, treatment of PIGN.

### Case Details :

**Case 1 :** 46 Years female admitted with fever, shortness of breath, generalized body swelling. She had rapidly progressing renal failure (Initial Urea 178mg/dl, Creatinine 8mg/dl, urine output 500ml in 24hrs which progressed to anuria) and was put on dialysis. Urine had plenty of pus cells, plenty of RBC with presence of albumin. Serum C3 was low, C4 was normal, ANA, MPO ANCA & PR3 ANCA were Negative. Kidney biopsy suggested feature of PIGN. Patient was managed with IV Methylprednisolone and was on dialysis support for around 1.5 months.

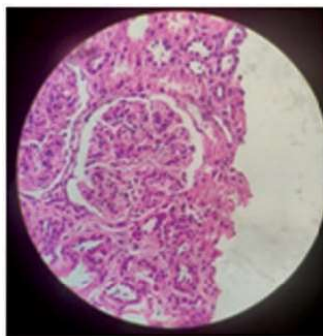
**Case 2 :** 54 Years male complained of fever with cough for 2 weeks followed by pedal swelling and facial puffiness for 2 days, decreased urination and high coloured urine. Patient had

new onset hypertension (BP 200/100). Urine had 18-20/hpf RBCs, granular casts, albumin 2+. 24 hr urinary Protein excretion was 3.1 gm. Serum C3 was low, C4 was normal; ANA, MPO & PR3 ANCA were Negative. Kidney biopsy was suggestive of PSGN.

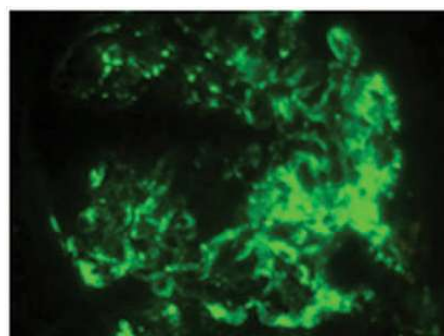
**Case : 3** 49 Year complained of progressive bilateral pedal swelling for 3 days with history of fever with cough 10 days ago. HRCT Thorax showed bilateral lung consolidation. Urine had 8-10 RBC/hpf, albumin 2+. 24 hour urinary protein was 10 gm. Serum c3 c4 were normal anti GBM antibody was negative. Renal biopsy showed acute PSGN.

### Conclusion :

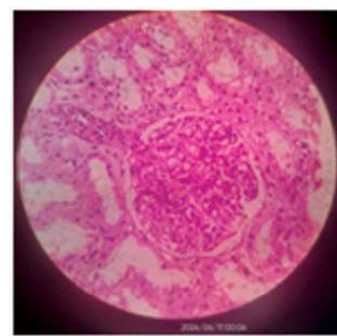
Among 3 cases of PIGN, Case 1 presents as a rapidly progressive glomerulonephritis, requiring dialysis and around 2 months to recover. Case 2 represents classical nephritic syndrome, resolved on its own without any aggressive treatment. Case 3 showed nephrotic range proteinuria which should be differentiated from other causes of nephrotic syndrome.



Case 1



Case 2



Case 3

## **Arginine Vasopressin Deficiency (AVP-D)**

**Ashmita Giri**

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### **Introduction :**

Arginine vasopressin deficiency (AVP-D) formerly known as central diabetes insipidus (DI) is a rare disorder with diverse etiologies. Approximately 30-50% cases of AVP-D are idiopathic. Hypophysitis is a rare etiology of AVP-D which consist of inflammation of pituitary gland. Among all other presentations of hypophysitis, diabetes insipidus kind of presentation is quite uncommon.

### **Case Description :**

A 43 year old female admitted with complain of polyurea and polydipsia of around 15-20 litres in a day since last 4 months. Her urine and serum osmolality was done through freezing point depression technique where reports were 86

mOsm/kg and 297 mOsm/kg respectively. Vasopressin test was done where AVP-D was diagnosed. MRI pituitary with gadolinium contract was done where stalk thickening was noted (>4mm). IgG4 disease, germinoma, other germinomatous lesion, sarcoidosis was ruled out. ANA profile showed SSA native antibody positivity with low titre. She was started on desmopressin and responded well.

### **Conclusion :**

Any patient presenting with polyuria and polydipsia should be properly investigated because continuing symptomatic management without addressing the etiology can be detrimental. AVP-D is a rare presentation of hypophysitis which we should keep in mind. Proper workup with follow up is essential.

## **CMV Infection in Perinatal Period and Importance of Urine CMV PCR and Early Treatment**

**Moulik Pariya**

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**Introduction :** CMV is one of the infections that affects the baby in the perinatal period, and can target multiple organ like liver, eye, brain etc. Here we are discussing about three such cases of CMV infection diagnosed with the help of urine CMV PCR and treated according to protocol and patients improved.

**Objective :** To highlight the importance of urine CMV PCR and early treatment in cases of CMV infection in baby in perinatal period.

**Case Summary :** All these patients presented in the perinatal period, with interest, one presented with hemochromatosis. Conjugated fraction of bilirubin was raised. CMV IgM was not positive

in all the cases however when urine CMV PCR came positive, they were treated with valgancyclovir and clinical improvement was seen.

**Method :** A detailed clinical examination and multidisciplinary diagnostic approach were employed including both pathological and radiological investigations.

**Result :** Condition of patients improved with medical management, currently in follow up.

**Conclusion :** These cases undermines the value and importance of urine CMV PCR for diagnosing perinatal CMV infection in baby and also the need of urgent treatment for better prognosis of the patient.