

Lupus Erythematosus Syndrome and Anti Phospholipid Syndrome in a 44-Year-Old Man

Aqsha Tiara Viazelda¹, I Nyoman Suarjana²

¹IRSUD M. Th. Djaman, Indonesia,

²Universitas Lambung Mangkurat, Indonesia

Email: shaviazelda@gmail.com, suarjana_2410@yahoo.com

ABSTRACT

Antiphospholipid syndrome (APS) is a thrombotic disorder often associated with Systemic Lupus Erythematosus (SLE), predominantly diagnosed in women. This case report highlights the rare occurrence of APS in a 34-year-old male presenting with headaches, joint pain, and a history of mitral valve replacement. The study aims to underscore the diagnostic challenges and clinical management of APS in male patients, who lack typical obstetric symptoms. A retrospective descriptive approach was employed, utilizing patient history, physical examinations, and laboratory tests, including CT scans and immunoserological assays. Diagnostic criteria followed the 2019 ACR/EULAR guidelines for SLE and 1990 ACR criteria for APS. Findings revealed elevated leukocytes, dyslipidemia, and positive lupus anticoagulant, confirming APS with SLE. The patient received pulse methylprednisolone, immunosuppressants, and warfarin, achieving clinical improvement. This case emphasizes the need for heightened suspicion of APS in men with unexplained thrombotic events, as delayed diagnosis can exacerbate complications. The study advocates for comprehensive autoantibody testing and multidisciplinary management to mitigate risks of thrombosis and organ damage.

Keywords: Anti Phospholipid Syndrome, Sistemik Lupus Eritematous

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Abstract

INTRODUCTION

Antiphospholipid syndrome (APS) is a condition of blood clotting characterized by thrombosis or vascular blockage disorders and/or obstetric disorders. APS condition is established by the presence of clinical symptoms in the presence of autoantibodies, including lupus anticoagulants, anticardiolipin antibodies, and anti- β 2-glycoprotein antibodies 1 (Schreiber K, Sciascia S, de Groot PG, Devreese K, Jacobsen S, Ruiz-Irastorza G, 2018). Patient APS is generally diagnosed in adolescence to productive age at the age of 15-50 years and only <13% are diagnosed over the age of 50 years (Grimaud F, Yelnik C, Pineton de Chambrun M, Amoura Z, Arnaud L, Costedoat Chalumeau N, 2019). The prevalence of APS in the world is estimated at 2 in 100000 people every year (Duarte-García A, Pham MM, Crowson CS, Amin S, Moder KG, Pruthi RK, 2019). Based on epidemiological research conducted in 2019 in Australia in 2019, the incidence of APS increased in the last year, where there were 2.1 cases per 100000 population, the average age was 54 years old with APS cases occurring around 55% in women (Duarte-García et al., 2019).

The clinical manifestations of APS are different, but generally what appears is blockage (thrombosis) in the venous blood vessels, arteries to small blood vessels and the presence of complications from pregnancy such as frequent miscarriage, preeclampsia and fetal development disorders, so that APS is easier to diagnose in the case of women of productive age (Schreiber K, Sciascia S, de Groot PG, Devreese K, Jacobsen S, Ruiz-Irastorza G, 2018). In old age, clinical symptoms that often appear in people with APS are frequent chest pain to

stroke, but until now there is no specific pattern that directs APS condition as the main cause of stroke or chest pain in old age (Grimaud F, Yelnik C, Pineton de Chambrun M, Amoura Z, Arnaud L, Costedoat-Chalumeau N, 2019).

Gender is estimated as a risk factor for primary clinical manifestations of APS, with the involvement of *central nervous system* (CNS) in women and gastrointestinal disorders in men. However, as an autoimmune disease, various complex disorders in various conditions can appear such as manifestations on the skin, obstetric, neurological, cardiological complications to kidney involvement. (Shil et al., 2020) Based on these clinical manifestations, APS is indeed more often diagnosed in women than men, but there are no significant data that mention the difference in the number of men and women in arterial and venous thrombosis as a clinical manifestation (Elmujtba et al., 2020).

Overall, manifestations in the heart and brain that are known at a young age can lead to disorders due to APS, because the manifestations that appear are heart valve disorders, pulmonary hypertension, heart infarction, ventricular dysfunction and stroke. A marker of this condition is the occurrence of these manifestations at a young age with the detection of anti-phospholipid antibodies (anti-phospholipid antibodies / aPL), namely cardiolipin or β 2-glycoprotein I (β 2-GPI) antibodies atau adanya lupus anticoagulants (LA) (Tsiakas et al., 2020).

Antiphospholipid syndrome (APS) is a systemic autoimmune disorder characterized by thrombosis and obstetric complications, primarily driven by antiphospholipid antibodies such as lupus anticoagulant, anticardiolipin, and anti- β 2-glycoprotein I antibodies. Historically, APS has been extensively studied in women due to its strong association with pregnancy-related morbidity, such as recurrent miscarriages and preeclampsia. However, emerging evidence suggests that APS in men presents with distinct clinical manifestations, including arterial and venous thrombosis, valvular heart disease, and cerebrovascular events, often leading to delayed or missed diagnoses. Previous research has predominantly focused on female populations, leaving a significant gap in understanding the epidemiology, pathophysiology, and optimal management of APS in males. This gender disparity in research underscores the need for more inclusive studies to refine diagnostic and therapeutic approaches for male patients.

Despite growing recognition of APS as a multisystem disorder, the literature on male-specific presentations remains sparse. Studies indicate that men with APS are more likely to exhibit thrombotic events, such as stroke and myocardial infarction, at a younger age compared to their female counterparts. However, the absence of obstetric symptoms in men often results in underdiagnosis or misdiagnosis, particularly in regions with limited access to specialized immunoserological testing. A critical research gap exists in elucidating the immunological and genetic factors that may predispose men to thrombotic APS, as current diagnostic criteria and treatment protocols are largely extrapolated from female-dominated cohorts. Addressing this gap is essential to improve clinical outcomes and reduce the burden of preventable complications in male patients.

The urgency of this research is underscored by the potentially life-threatening consequences of undiagnosed or poorly managed APS in men. Delayed recognition of APS can lead to recurrent thrombosis, progressive organ damage, and increased mortality, particularly in cases complicated by concomitant autoimmune diseases like Systemic Lupus Erythematosus (SLE). Furthermore, the lack of gender-specific guidelines for APS

management exacerbates disparities in care, leaving clinicians to rely on anecdotal evidence or generalized protocols. Given the rising prevalence of autoimmune diseases globally, there is an urgent need to investigate the unique aspects of APS in men to inform evidence-based practices and reduce diagnostic delays.

This study introduces novelty by focusing on a rare case of APS in a 34-year-old male with SLE, highlighting the challenges of diagnosis and management in the absence of typical obstetric markers. Unlike most reported cases, this patient presented with cerebrovascular infarction and a history of mitral valve replacement, emphasizing the need for heightened clinical suspicion in men with unexplained thrombotic events. By integrating detailed laboratory, imaging, and therapeutic data, this research provides insights into the phenotypic variability of APS in males and the importance of multidisciplinary care. The case also explores the role of dyslipidemia and lupus anticoagulant in thrombotic risk, offering a fresh perspective on the interplay between metabolic and autoimmune factors in APS pathogenesis.

The primary objective of this research is to delineate the clinical and immunological profile of APS in male patients, with a focus on improving early detection and tailored treatment strategies. By analyzing a real-world case, the study aims to identify key diagnostic red flags, such as unexplained thrombosis or valvular abnormalities, that should prompt autoantibody testing in men. Additionally, it seeks to evaluate the efficacy of current therapeutic regimens, including anticoagulation and immunosuppression, in male-specific APS manifestations. These findings will contribute to a more nuanced understanding of the disease and inform future revisions of diagnostic criteria to better accommodate male presentations.

Beyond its clinical implications, this research holds significant benefits for public health and healthcare systems. Improved recognition of APS in men can reduce the economic and social burden associated with recurrent hospitalizations, disability, and premature mortality. By raising awareness among clinicians, the study may also mitigate diagnostic delays and prevent irreversible complications, such as stroke or heart failure. Furthermore, the findings could pave the way for gender-specific research initiatives, fostering a more equitable approach to autoimmune disease management. Ultimately, this work aligns with global efforts to address disparities in autoimmune care and promote personalized medicine.

The intersection of APS and SLE in this case further underscores the complexity of managing overlapping autoimmune conditions. While APS occurs in approximately 30% of SLE patients, its presentation in men with SLE is poorly documented, leaving clinicians with limited guidance. This research bridges that knowledge gap by providing a comprehensive account of diagnostic and therapeutic decision-making in a high-risk patient. The study also highlights the role of advanced immunoserological testing, such as anti-dsDNA and complement assays, in confirming APS and monitoring disease activity, which may be particularly relevant for male populations.

Another critical aspect of this research is its emphasis on the psychosocial and occupational impact of APS in men. The case patient, a heavy equipment technician, faced significant disruptions to his livelihood due to recurrent symptoms and hospitalizations. By exploring these dimensions, the study sheds light on the broader societal implications of undiagnosed autoimmune diseases, particularly in physically demanding professions. This perspective is often overlooked in clinical research but is vital for developing holistic care models that address both medical and quality-of-life outcomes.

In patients with APS, from those published in 2021 from Taiwan, a strong association was found between APS cases and Lupus Erytematous Syndrome (SLE). As an autoimmune disorder, SLE can manifest as a hematological and vascular disorder so it has a strong correlation, where APS cases are accompanied by SLE as much as 30%(Chen et al., 2021). There was an increase in the frequency of thrombocytopenia, anemia, and a decrease in complement levels in SLE cases with APS, but there was no significant difference in the frequency of thrombosis and morbidity in pregnancy with SLE(Unlu et al., 2019). The following is a reported case, a 34-year-old man with parietal lobe infarction, a history of mitral valve replacement and anti-phospholipid positive syndrome antibody.

RESEARCH METHODS

This study is a descriptive case study (case report) with a retrospective approach that reported a 34-year-old male patient with a diagnosis of SLE and APS who was treated at M. Th. Djaman Hospital in April 2022. Data were collected through anamnesis (autoanamnesis and allanams), comprehensive physical examinations, and gradual supporting examinations according to clinical indications.

Table 1. Stages of Data Collection

Component	Method	Implementation Time	Parameters Assessed
Anamnesis	Live interviews with patients and families	April 7, 2022	Main complaints, history of disease, medical history, social history
Physical Examination	Systemic clinical observations	April 7, 2022	Vital signs, head-to-toe examination, neurological assessment, VAS pain scale
Basic Laboratory	Blood and urine sampling	6-10 April 2022	Complete blood, blood chemistry, lipid profile, organ function, hemostasis, urinalysis
Radiologi	Imaging examination	6-7 April 2022	Thoracic photo, ECG, CT scan of the head, echocardiography
Immunoserologists	External laboratory inspection	April 14, 2022	C3/C4 complement, anti-dsDNA, anticoagulant lupus
Data Retrospective	Medical record review	November 2020	ANA Profile (SS-A Ro, ds-DNA, Histones, SS-B La)

Diagnostic and Analytical Criteria

Diagnosis was established using the 2019 ACR/EULAR criteria for SLE and the 1990 ACR criteria for APS. Assessment of SLE disease activity using MEX SLEDAI score with classification: mild (<6), moderate (6-10), severe (>10). The data was analyzed descriptively with interpretation based on laboratory normal value standards and the latest guidelines.

Management and Monitoring

Therapy was provided according to the SLE and APS management guidelines with clinical and laboratory response monitoring for 6 days of treatment. Multidisciplinary consultations are carried out with the neurology and cardiology departments. The ethical aspect is maintained through informed consent and confidentiality of patient identities in accordance with institutional regulations.

RESULTS AND DISCUSSION

Case Reports

Basic Data

Patient Identity

The patient was a 34-year-old man who was admitted to Ulin hospital on April 6, 2022. The patient is Javanese, Muslim and currently lives at his home in Martapura with his wife, children and in-laws. The patient is a Heavy Equipment Technician Manager at an Oil Palm Company in Batu Licin, with a D3 education. The patient was the first time to go to ulin with a medical record number 01500594. Anamnesis was carried out on April 7, 2022 through auto and alloanamnesis in the patient and the patient's wife.

ANAMNESIS

Patients come with the main complaint of headaches. The patient has been experiencing headaches since a week of SMRS, the head feels throbbing pain, especially in the upper part of the head. It does not improve with rest and feels burdensome if the OS is standing or active, so the OS lies down a lot. Initially it appeared after OS changed his work shift schedule to frequent night watches, OS found it difficult to focus during activities, pain decreased after taking anti-pain medication but soon returned. OS suspected that it was due to lack of rest and not going to the doctor. The pain did not change after one week and the head felt more and more often throbbing, the OS became more restless and sometimes looked pensive so the family was worried and took it to the doctor. OS does not experience changes in speech, consciousness and also weakness on one side of the body. OS does not experience seizures or vomiting, but feels recurrent joint pain, especially in the morning throughout the body, according to the family, joint pain complaints have often been experienced since 2020 and have experienced improvement. OS does have a history of immune disorders and was once directed to a Rheumatologist for a follow-up examination but did not continue the examination.

OS has been nauseous since 1 week, after the headache appears. Nausea makes it difficult to swallow food, and OS meal portions decrease. Eating 2x a day only runs out of half a meal. 1 day SMRS OS naturally vomits 2x water and food content. Complaints of fever, cough, runny nose, BAK disorder and bowel movement were denied.

OS had experienced an incident of redness and joint pain in early 2020, at which time he had been referred to a doctor because he suspected he had lupus, but after taking methylprednisolone from the doctor, the OS felt better and did not proceed to a rheumatology doctor. OS had been taking Imuran 1x200 mg and Methylprednisolone 2x4 mg for several months but because there were no more complaints, OS stopped and did not return to control.

In August 2020 OS experienced recurrent chest pain and was checked to a cardiologist, it was said that there was damage to the heart valve and the OS was referred for valve surgery in Jakarta. OS came for routine check-ups to the cardiologist after valve surgery 3 times and after that did not return to control because there were no complaints. OS admitted that he had consumed 1x80 mg of aspilet and 1x75 mg of CPG but had not consumed it again since the end of 2021. Previous history of DM, cholesterol and hypertension was denied.

The patient is a D3 graduate with a permanent job as a technician manager at an Oil Palm Company in Batu Licin. OS lives in a plantation housing with his wife and children. After

getting sick, OS lived at his house in Banjarbaru and had not worked actively since the last 1 week. OS does not have tattoos, does not drink alcohol, does not smoke but is in a smoking environment. Sleep routines are admittedly irregular because they are often on duty at night.

PHYSICAL EXAMINATION

A physical examination was carried out on April 7, 2022, found in patients in a state of moderate pain, awareness of mentis compost with GCSE4V5M6 , blood pressure 120/80 mmHg, pulse rate 68 times/minute, breathing rate 18 times/minute, temperature (axillary) 36.3 °C, Saturate 97% of the water room, VAS 4-5 even in a still and resting condition. The patient weighed 52 kg with a height of 165 cm, the patient's BMI was still normal with a value of 20 kg/m².

On eye examination, no pale conjunctiva or icteric sclera were found. In the mouth, the mucosa of the lips is wet, *oral thrush* is absent. JVP jugular venous pressure is 5+1cm H₂O and there is no enlargement of the lymph nodes. On lung examination, it was found that the sound of vesicular breath was found, there was no rhonki or wheezing. On the heart examination, a single, regular, and no murmur heart sounds I - II were obtained. On the abdominal examination, normal intestinal noise, tympanic percussion, suppel palpation, no pressure pain, liver, lien, and mass were not palpable. Examination of the extremities found no edema in all the patient's limbs, the patient's motor and sensory were still in good condition 55/55.

PATIENT CLINICS



Os sleeps more and comfortably sleeps on the side

SUPPORTING EXAMINATIONS

Laboratory supporting examinations were carried out at the beginning of treatment on April 6, 2022 and obtained Hb levels of 14.6 g/dL, MCV 82 fl and MCH 27 pg, leukocytes

13,800 /uL, platelets 375,000/uL, lymphocyte count: 20.7%, with a neutrophil percentage of 70.4%, blood sugar at 153 mg/dL, total cholesterol 216 mg/dL, HDL 55 mg/dL, LDL 163 mg/dL and Triglycerides 210 mg/dL, albumin: 4.3 g/dL, SGOT/SGPT 18/25 U/L, ureum 29, creatinine 0.95 mg/dL, sodium: 134 mmol/L, potassium 3.4 mmol/L, chloride 104 mmol/L. Anti-HCV, HbsAg, and anti-HIV values in non-reactive patients and C-19 antigen swab results in negative patients

The patient was also examined by the hemostasis laboratory several times with the following results, on April 6, 2022 pt/Aptt/INR 43.2/44/4.41 seconds, on April 7, 2022 13.3/32.8/1.23, and on April 10, 2022 14.8/24.7/1.4.

The patient was examined for urinalysis at 2 times. On April 6, the results were yellowish and cloudy, specific gravity 1020, Ph 6.5, ketone negative, protein albumin trace, glucose negative, bilirubin negative and faint blood +2, urine sediment obtained the number of leukocytes >50. On April 8, 2022, a light light yellow color, specific gravity of 1020, Ph 6, ketones negative, glucose negative, bilirubin negative and dark blood were negative, urine sediments were obtained with a leukocyte count of 0-1.

On the ECG examination, sinus rhythm, regular, 60 times/min, horizontal axis at V3, frontal axis normal, P wave: 0.10 normal, PR interval: 0.20 seconds, normal QRS complex, no pathological Q picture, normal ST segment, inverted T wave and T tall none, with sinus rhythm ECG impression of 60 times/minute.

On the thorax X-ray examination of the patient on April 6, it was found that there was no sternal wire and ring valve in the heart with a normal heart size with the impression that there was a post installation of a ring on the patient's heart valve.

A CT scan of the head without contrast on April 6, 2022, found the presence of hypodens lesions in the parietal lobe of the extra-parietal lobe with the impression of a parietal lobe infarction.

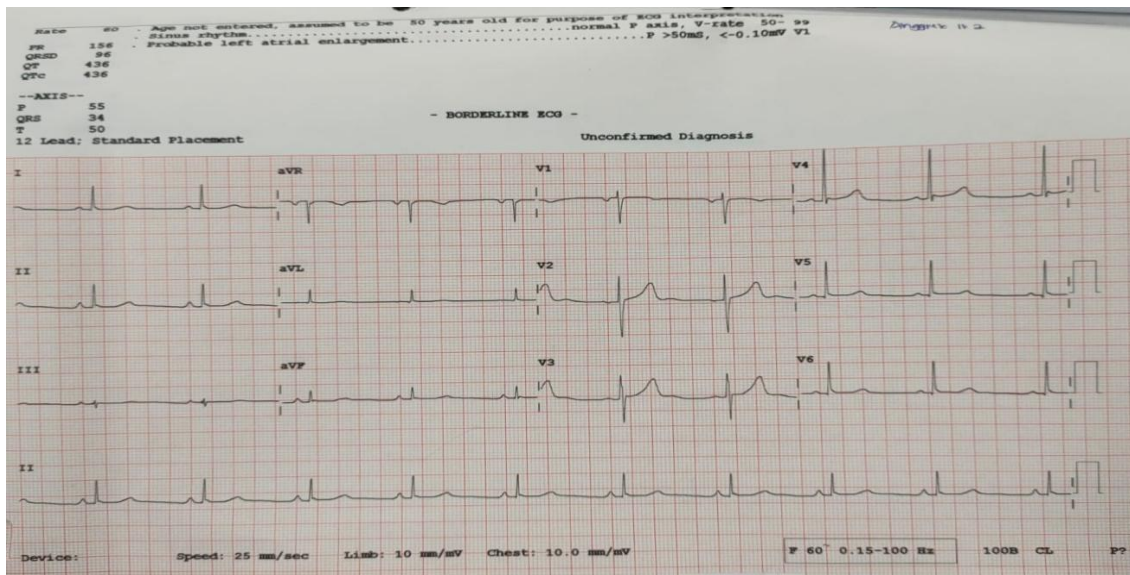
The patient was also examined for echocardiography on April 7, 2022 with an EF result of 67%, the presence of a properly functioning insitu MV prosthetic valve, no cardiac thrombus and no impairment of LV and RV function, normokinetic heart condition and no LVH.

Additional supporting examinations were carried out outside Ulin Hospital to confirm the condition of the patient's disease, so that the patient was examined in an outside laboratory on 14-4-2022, obtaining C3 Complement 105 mg/dl, C4 Complement 20.3 mg/dl, and Anti-dsDNA results 251.6 IU/ml. The results of the anticoagulant lupus examined showed LA 1: 66.4 seconds, LA 2: 42.6 seconds, LA 1:LA 2 = 1.56 with a moderate LA effect.

The patient also showed the old ANA Profile examination November 2020 which showed SS-A Ro strong positive, Ro-52 strong positive, SS-B La strong positive, ds DNA strong positive, Nucleosomess strong positive, Histones strong positive, DF570 strong positive.

EKG 6 APRIL 2022

Lupus Erytematous Syndrome and Anti Phospolipid Syndrome in a 44-Year-Old Man

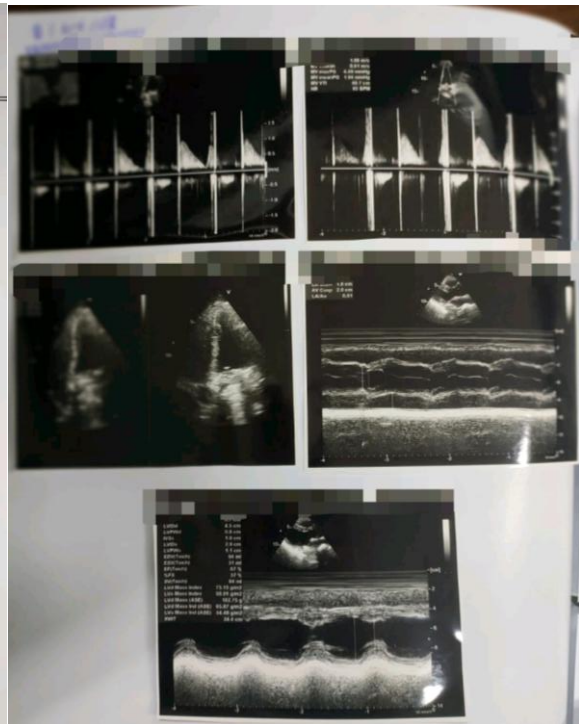
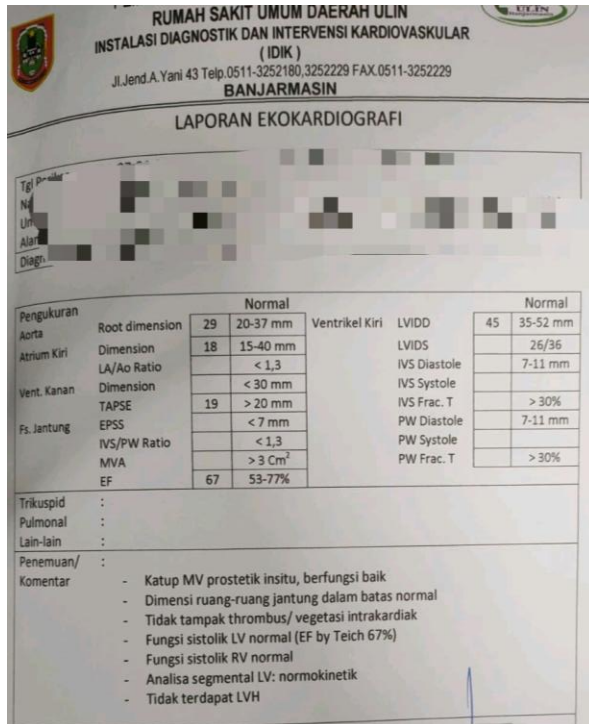


CT Scan of Head 06/04/2022 Ulin Hospital

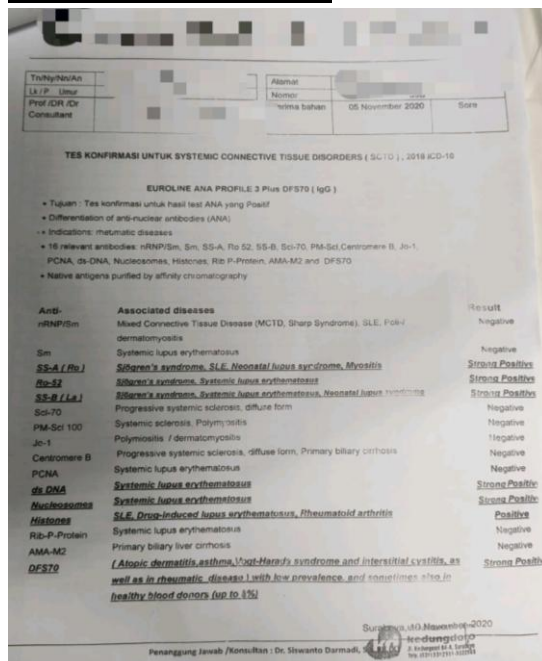
Rontgen Thorax RSUD Ulin 6/4/22



ECHOCARDIOGRAPHY 7 April 2022



ANA Profile 05/11/2020



Kriteria Anti Phospholipid Syndrome berdasar ACR 1990:

Trombosis Vaskular (+)

Lupus Anticoagulan (+)

Conclusion: In APS Classification

Criteria for Systemic Lupus Erythematosus based on ACR/EULAR 2019:

Domain arthritis (+)

Domain Neurology (+)

Domain antibody antifosfolipid (+)

Antibody domains are very specific (+)

Conclusion: 16 points, In LES Classification

Mex Sledai Score =16

Arthritis (2)

CVA (8)

Hematuria (6)

Resume Data Dasar

In the patient, headaches were obtained since a week of SMRS, throbbing, especially in the upper part of the head and did not improve with rest, accompanied by nausea. There is recurrent joint pain first thing in the morning on the whole body. The patient had a natural history of joint disorders and redness in early 2020, was said to be autoimmune and took methylprednisolone with Imuran but stopped on its own. The patient also had a natural history of heart valve algae and surgery in 2020.

On physical examination, a normal condition was found with an increase in VAS levels of 4-5. The results of the supporting examination showed that the blood test showed an increase in leukocytes of 13,800, high lipid profile levels of total cholesterol of 216 mg/dL, HDL of 55 mg/dL, LDL of 163 mg/dL and Triglycerides of 210 mg/dL, disturbances in pt/Aptt/INR 43.2/44/4.41 seconds. On April 6, the results of yellowish and cloudy urinalysis were obtained, specific gravity 1020, Ph 6.5, ketone negative, protein albumin trace, glucose negative, bilirubin negative and faint blood +2, urine sediment obtained the number of leukocytes >50.

The patient also had an artificial heart valve on the mitral from X-ray and echocardiography images. From the CT Scan of the Head Without Contrast, it was found that the infarction stroke in the parietal lobe was extra. The patient also showed the old ANA Profile examination November 2020 which showed SS-A Ro strong positive, Ro-52 strong positive, SS-B La strong positive, ds DNA strong positive, Nucleosomess strong positive, Histones strong positive, DF570 strong positive. So that patients enter the SLE criteria of the degree of severity according to the ACR/EULAR 2019 criteria and must receive therapy according to the degree of disease activity, namely MEX SLEDAI 16 at this time.

An external laboratory examination was carried out on the patient and the results of C3 complement 105 mg/dl, C4 complement 20.3 mg/dl, and Anti dsDNA results were obtained 251.6 IU/ml. The results of the anticoagulant lupus examined showed LA 1: 66.4 seconds, LA 2: 42.6 seconds, LA 1:LA 2 = 1.56 with a moderate LA effect. So that the patient enters the criteria for Anti-Phosfolipid Syndrome according to the APS 1990 ACR criteria.

List of Initial Problems

1. Chronic Cephalgia dt SLE degree weight mex sledai 16 with cerebrovascular, joint, renal involvement dd SNH
2. Dyslipidemia

3. Post OP Mitral Valve
4. Anti Phospolipid Syndrome
5. Stroke Non Hemoragik related SLE
6. Dyslipidemia
7. Post OP Mitral Valve

Initial Plan

The problem experienced by the patient is headache as a manifestation of the condition SLE that the patient suffers from. The patient brought the patient's ANA Profile results and was supported by the results of a CT scan of the head in the emergency room, so that they received therapy for headaches in the form of Inj. Citicolin 2x500mg, Inj. Tramadol 3x100 mg, and oral administration of Gabapentin 2x100mg, Flunarizin 2x5 mg, Amitriptyline 12.5 mg and PCT 3x500mg. The patient was also given severe SLE therapy with Pulse Methylprednisolone 500mg for 3 days. The patient is consulted to the neurology department for the patient's non-hemorrhagic stroke condition. Monitoring of patient complaints, vital signs, pain assessment, and changes in the patient's MEX SLEDAI score was carried out to determine the patient's SLE activity.

The following problem is the dyslipidemia condition that occurs in patients. The patient was given atorvastatin therapy 1x40 mg and monitored lipid profile levels and educated the patient to avoid high-fat foods. The next problem is the history of mitral valve surgery in the patient, planning of the cardiology department consul for echocardiography and looking at the patient's heart function and valve condition. Patients are monitored for complaints, vital signs and an ECG if there are complaints.

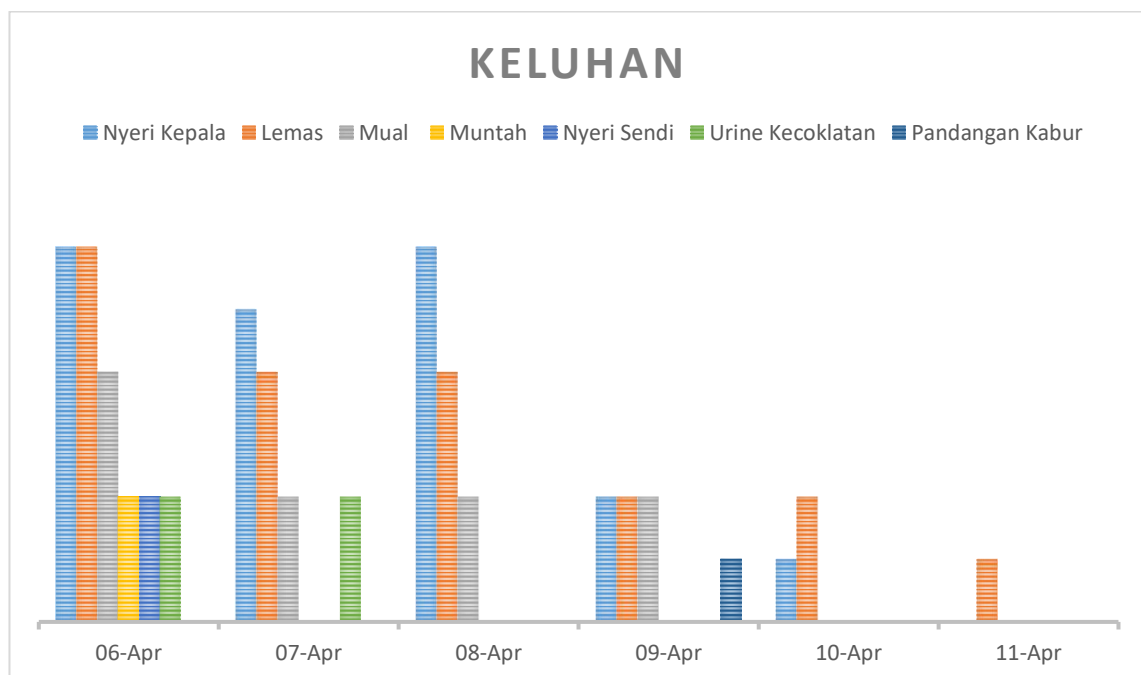
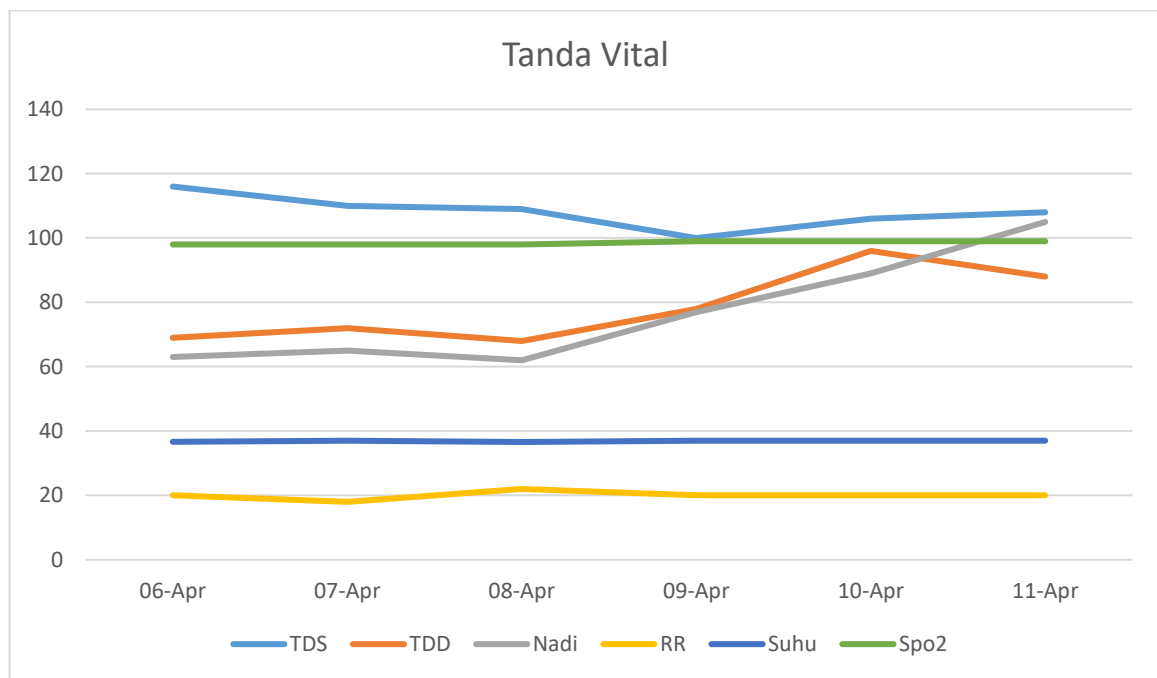
Follow-up Plan

On the first day of treatment, the patient is carried out a complete examination of conditions, complaints, laboratory and supporting examinations which can be carried out on the first day in the emergency room and while being treated at Orchid Second Floor. The patient is consulted to the neurology department regarding the description of the stroke experienced and receives therapy for the headache that occurs, and is planned to consult the cardiology department for echocardiography related to the image of the thorax x-ray which shows the presence of an artificial heart valve. The results of the patient's ANA Profile in 2020 were obtained and the patient was given SLE therapy according to the degree of disease activity experienced. The patient received an additional injection of Methyl Prednisolone pulse Inj. MethylPulse 500mg/24 hours for 3 days, MMA 2x720mg, HCQ 1x200mg, Caco3 3x500mg. The patient was also planned for an anti-phospholipid syndrome examination related to the relationship between the condition of the stroke and the history of valve disorders experienced by the patient, so that the patient was given warfarin blood thinner.

On the third day of treatment, a re-examination of the patient's condition was carried out and the patient admitted that joint pain and nausea had decreased, but the headache was still persistent, so he was given additional painkillers in the form of Gabapentin 2x100mg, Flunarizin 2x5 mg, Amitriptyline 12.5 mg, PCT 3x500mg. From the results of the consultation to the cardiology department, the results of the patient's echocardio were normal and the artificial heart valve was functioning well.

The patient experienced an improvement in condition and complaints on the 4th day and an external laboratory examination was carried out to enforce the patient's Anti-Phospolipid Syndrome condition.

The patient feels that his condition is improving, headache complaints are still gone but have improved. There is no weakness in the limbs and the OS is active as usual. On the sixth day of OS treatment, he was allowed to go home and routine OS control for SLE and APS at the rheumatology poly and supervision of warfarin use was carried out at the warfarin poly of Ulin Hospital.



Therapy during Treatment

6-Apr	7-Apr	8-Apr	9-Apr	10-Apr	11-Apr
IVFD RL 20 tpm					
Inj. Omeprazol 1x40 mg			PO Omeprazole 1x20		
Inj. Citicolin 2x500 mg					
Inj. MP Pulse 500/24 jam			PO MP 3x16 mg		
PO MMA 2X720 mg					
PO HCQ 1x200 mg					
PO Caco3 1x500mg					
PO Clopidogrel 1x75 mg		PO Warfarin 1x2 mg			
PO Atorvastatin 1x40 mg					
IV Tramadol 3x100mg		PO Gabapentin 2x100mg			
		PO Flunarizine 2x 5 mg			
		PO PCT 3x500 mg			
		PO Amitriptyline 12.5 mg			

Outpatient Conditions

Diagnosis home:

1. SLE degree of severity with Neuropsychiatric, joint, kidney involvement (improvement)
2. Anti Phospolipid Syndrome
3. Stroke Non Hemoragik related no 1
4. History of mitral valve replacement Related no 2
5. Dyslipidemia

In this case, the patient was diagnosed with Systemic Lupus Erytematous with Anti Phospolipid Syndrome. From the anamnesis, headaches were obtained, especially in the upper part of the head. OS feels nausea and vomiting since the headache and appetite decrease. OS has a history of autoimmune disorders since 2018 but did not continue the examination to a Rheumatologist specialist.

The patient's headache complaints are directed towards blood flow blockage, so supporting examinations are carried out to support clinical diagnosis in patients. Complaints of recurrent joint pain and decreased focus in patients lead to clinical enforcement of SLE that the patient experiences.

From the anamnesis, in 2020 patients from the anamnesis, clinical symptoms of Lupus were obtained Eritematous Systemic is in the form of redness of the skin on the face from the right cheek to the left cheek when exposed to sunlight, and recurrent joint pain until you get tired quickly. When the ANA Profile was examined, the results were obtained including anti-SS-A Ro, anti-ds DNA, anti-Histones, anti-SS-B La strong positive. This value shows that the prevalence towards SLE based on adult SLE has an increase in ANA (Anti Nuclear Antibody). ANA is an active serum auto antibody because there is an acclimatization of auto-reactive lymphocyte cells, the presence of this auto antibody indicates an immune disorder. The type of ANA that can be detected leads to its own type of immune disorder. There are several ANA

patterns, but in the case of adult SLE, 44% have 1 ANA pattern (homogenous 51%, fine speckled 16% and coarse speckled 5%), 42% have 2 ANA patterns (combination fine-coarse speckled 29%, homogeneous-fine speckled 23%, or homogenous-nuclear 11%)(Rodsaward et al., 2021). In SLE patients, the autoantibodies have different intracellular targets, but from several studies, it can be concluded that autoantibodies that are quite specific to SLE are dsDNA, Histone, Smith, and SS-A/Ro(Choi & Fritzler, 2019). In this patient, the presence of Strong Positive for the autoantibody was obtained so that the patient met the SLE criteria. The patient was asked to continue treatment in 2020 to a Rheumatology Consultant, but indeed the patient did not continue treatment, but continued to consume methyl prednisolone from an Internal Medicine Specialist until he finally felt better and stopped treatment in 2021.

From the physical examination, there was no hemodynamic disorder but there was an increase in VAS 4-5 in the patient. From other physical examinations, no abnormalities were found.

The abnormality began to be evident in the supporting examination in the form of laboratory interference which showed an increase in leukocytes by 13,800, this shows an ongoing inflammatory process in the patient. The patient's coagulation level also increased with pT, apTT and INR values increasing to 43.2, 44 and 4.41 according to the condition of the patient who had a history of autoimmune and the following coagulation disorders leading to thrombosis-type anti-phospholipid syndrome disorders.

Hypercoagulation conditions can occur in patients with *Anti Phospholipid Syndrome* (APS). APS is a condition that often accompanies SLE, where 30% of people with SLE experience condition APS(Sarmidi S, Kalim H, Setyohadi B, Hidayat R, Najirman, Hamijoyo L, Wijaya L, Rahmadi A, Wahono C, Rahmawati L, Nuridhin A, Kusumo W, Suryo A, 2020). This condition is easy to find in women characterized by an increase in vascular thrombosis and/or obstetric disorders in the form of miscarriage, accompanied by autoantibodies detected, namely lupus anticoagulants, anticardiolipin antibodies and anti- β_2 - glycoprotein antibodies(Tektonidou et al., 2019). The patient also has an age that is in accordance with the epidemiology of APS, namely at a productive age of 15-50 years, the presence of SLE conditions in accordance with the ACR classification, and a clinical presentation history that supports a history of blood flow blockage disorders that cause heart valve damage at a young age so that the patient must perform heart valve surgery at the age of 33 years without a history of congenital heart valve disorders or previous heart complaints. This is in accordance with the APS clinical criteria of the most frequent major manifestations in the presence of valve disorders as cardiac manifestations(Garcia & Erkan, 2018).

The patient also had an increase in cholesterol levels, namely 216 g/dl, LDL 163 g/dl, Triglyceride 210 mg/dl, this is in accordance with a study in India that showed an increase in cholesterol and LDL levels in APS patients. Increased triglycerides above 150 mg/dl in more than 50% of people with APS, and LDL levels above 150 mg/dl in 40% of people(Sadanand et al., 2017).

This is because serum lipoproteins also contain phospholipids, so they are targets for antiphospholipid antibodies. From the study, it was found that the cross-reaction between oxidized LDL and LDL increased the risk of atherosclerotic in APS patients, accompanied by a significant relationship between anti- β_2 G IgG levels and HDL and LDL levels. Anti- β_2 G Increase thrombotic activity of aCL antibodies and lupus anticoagulants and induces

procoagulant proteins so that it can characterize thrombotic APS conditions and increase atherothrombotic complications(Sadanand et al., 2017).

Based on the anamnesis and physical examination, the patient's condition leads to thrombotic type APS and this makes the enforcement of the patient's condition continued with supporting examinations.

A CT scan of the head revealed the results of hypodense lesions in the parietal lobe with the impression of infarction in the parietal lobe and a thorax X-ray examination which showed the presence of an artificial valve in the mitral valve and was still working well, according to the patient's anamnesis information who said he had a sudden heart valve disorder in 2021. The formation of thrombus in APS patients occurs because there are two mechanisms that occur. The first mechanism occurs due to injury of the endothelium of the cell so that it activates the formation of thrombus. Beta-2 glycoprotein I does not bind to endothelial stimulation in vivo. Patients with APS have low non-immune amounts of Beta 2 Glycoprotein 1, the endothelial surface cell receptor Annexin A2 is enhanced by oxidative stress so the presence of oxidative stress such as smoking or excessive exposure to ultraviolet light can lead to the possibility of thrombosis(Bustamante JG, Goyal A, 2022).

The patient performs other supporting examinations to check for other antibodies that the patient has, considering that the enforcement of APS in men is quite difficult and different from the case of APS in women which is generally characterized by obstetric disorders or a history of recurrent miscarriages, so that in men it is difficult to diagnose clinically.

Laboratory value of anticardiolipin antibodies, anti - $\beta 2$ - antibody glycoprotein I and antiphospholipid antibodies are essential for diagnosis(Tektonidou et al., 2019). These tests must be repeated after at least 12 weeks for confirmation of persistent antibodies, although some cases are seronegative(Elmujtba et al., 2020). In patients, positive results were obtained for moderate levels of lupus anticoagulants, where lupus anticoagulants are known to be associated with a higher risk of thrombotic events. Based on systematic reviews of antibodies in APS, Lupus Anticoagulant (LA) has a possible risk of thrombosis in veins and arteries with an odd ratio of 5-16 times higher, especially in cases of cerebral thrombosis (stroke) and deep vein (DVT) and has a high diagnostic and prognostic value for APS conditions(Meroni & Borghi, 2021). Patients also have a history of heart disorders to heart valve replacement at a young age, this is in accordance with several cases of APS in men who have heart disorders to the occurrence of Acute Coronary Syndrome at a young age.(Shan et al., 2018)

Based on the patient's condition, an assessment of the degree of the patient's disease condition was assessed based on the MEX SLEDAI. In patients with a new neurological disorder condition in the form of a stroke condition known from a CT scan of the head without contrast in the form of infarction stroke in the parietal lobe with 8 points, pain in the joints 2 points, and sediment disturbance in the urinalysis examination of 6 points, then the disease activity of this patient is 16 points, which is a severe condition. Based on guidelines(Fanouriakis et al., 2019), the therapy given for SLE conditions of severe disease activity with cerebrovascular involvement, is by administering high-dose IV glucocorticoids above 500 mg called pulse methylprednisolone(Hamijoyo et al., 2020) and looking for other comorbid conditions of the patient that can aggravate the conditions such as APS suffered by the patient.

The patient was given high dose of methyl prednisolone therapy (methyl pulse) 500 mg for 3 days and the patient experienced a change in his condition for the better. Patients were

also given first-line biologic agents such as hydroxychloroquine 1x200 mg and given immunosuppressing drugs, namely MMAR group with doses Myfortic 360 2x2tab. After the methylprednisolone pulse administration was completed for 3 days, the patient was given 3x16 mg of oral methylprednisolone.

Patients also received treatment for APS suffered by receiving warfarin-type anticoagulants when they returned home with a dose of 1x2 mg. The patient is asked to routinely control INR and until the time of return to control, the patient's condition has improved.

CONCLUSION

A case of a 34-year-old man who complained of continuous headache and did not improve even though he had been resting for 1 week has been reported. The patient had a history of autoimmune disorders that were not known precisely because they did not continue treatment to the Rheumatology department in 2021. The patient had a history of mitral heart valve damage which led to the patient undergoing heart valve replacement surgery in 2021. On physical examination, no abnormalities and vital signs of the patient were found during treatment within normal limits. Patients tend to be weak and lie down a lot, but physically there are no significant abnormalities so it can be a complication in enforcing a clinical diagnosis. The examination was followed by laboratory and supporting examinations.

The results of the head CT scan showed an infarction disorder in the parietal lobe of the dexter, which showed a coagulation disorder in the patient. This makes the search for etiology expanded again by checking laboratory results from outside laboratories due to the limitations of support in hospitals. From the examination, the values of negative anticardiolipin antibodies, anti- β_2 - negative glycoprotein I antibodies and anticoagulant lupus were obtained with a moderate level so that the patient met the criteria of Anti Phospholipid Syndrome which is difficult to enforce in male patients, so that it can be biased in the clinical enforcement of the disease and physical examination. The patient was treated with the administration of warfarin anticoagulant with a target of INR 2-3 and at the time of discharge the patient had a level of INR 1.23 and showed a condition of improvement.

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