SOUTH AFRICAN RHEUMATISM AND ARTHRITIS ASSOCIATION presents

News RHEUM

SPECIAL EDITION

Volume 5 No 2 - December 2024

★ WE CAN BE ★ HEROES

FEATURING

THANK YOU ★ ROCKETMAN AND I AM GRATEFUL

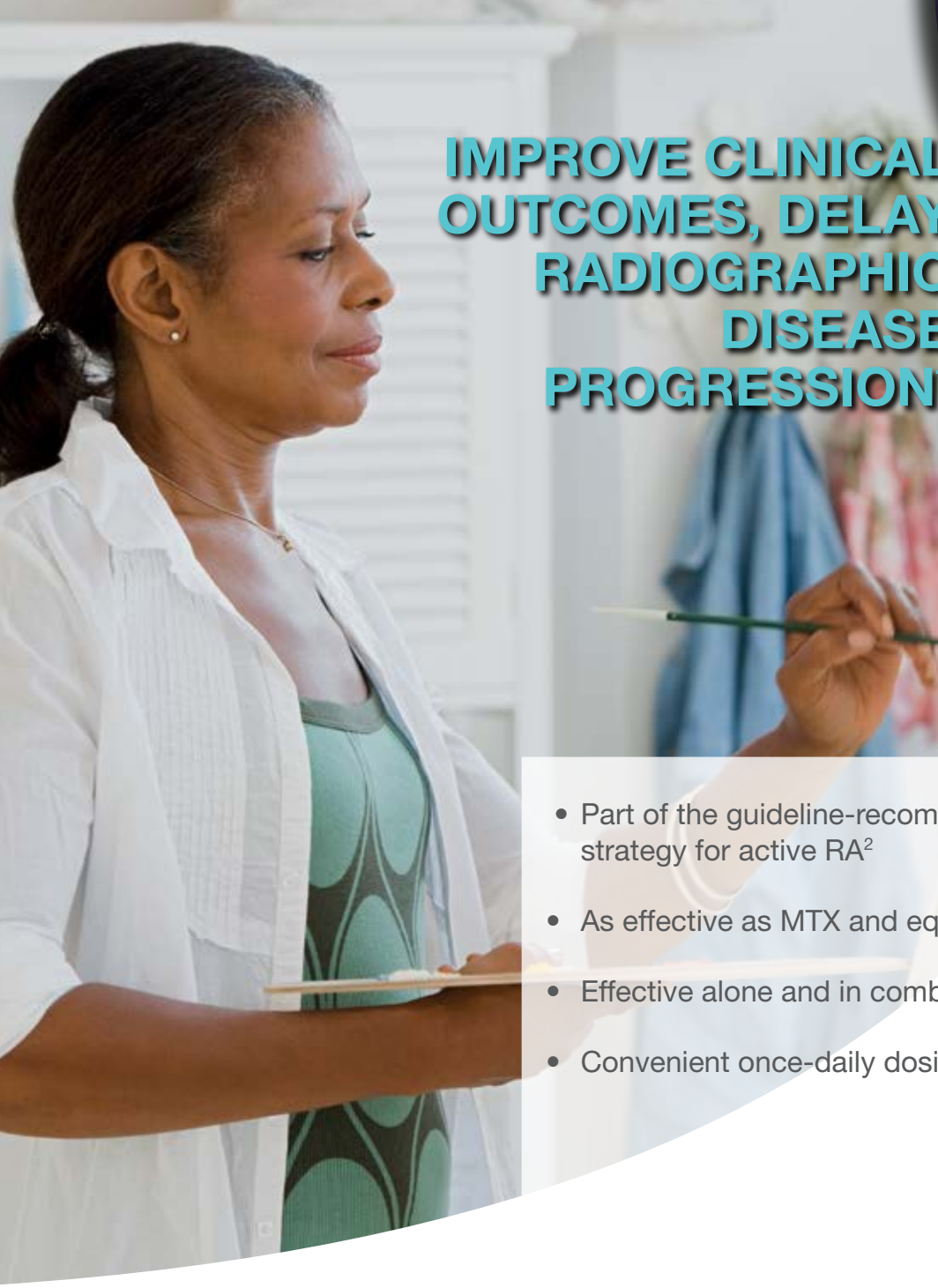
IF YOU CAN'T BEAT THEM NEVER GONNA GIVE YOU UP

SHINE ON YOU CRAZY DIAMOND

SARAA

An official publication of the South African Rheumatism and Arthritis Association

Moving forward together



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- As effective as MTX and equally well-tolerated[3,4]
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RA – rheumatoid arthritis, MTX – methotrexate, DMARD – disease-modifying antirheumatic drug

References:
1. Osiri M, Shea B, Welch V, *et al*. Leflunomide for the treatment of rheumatoid arthritis (Review). *Cochrane Database of Systematic Reviews* 2002;3:CD002047.
2. Smolen JS, Landewé R, Bijlsma J, *et al*. EULAR recommendations for the management of rheumatoid arthritis with synthetic and biological disease-modifying antirheumatic drugs: 2016 update. *Ann Rheum Dis* 2017;76:960-977.
3. Maddison P, Kiely P, Kirkham B, *et al*. Leflunomide in rheumatoid arthritis: recommendations through a process of consensus. *Rheumatology* 2005;44:280-286.
4. Alfaro-Lara R, Espinosa-Ortega HF, Arce-Salinas CA. On behalf of the PRECIS study group. Systematic review and meta-analysis of the efficacy and safety of leflunomide and methotrexate in the treatment of rheumatoid arthritis. *Reumatol Clin* 2017. http://dx.doi.org/10.1016/j.reuma.2017.07.020
5. Rheumalef Tablets approved package insert. 2015.
6. Reference on request.

S4 Rheumalef 10 Tablets. Each film-coated tablet contains leflunomide 10 mg. Reg. No. 45/3.1/0404.
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The front cover has been designed to mimic a concert poster. It incorporates the main chorus line from probably the most famous David Bowie song and the familiar "Ziggy Stardust" lightning symbol. This forms the theme of this issue of NewsRheum, which links the power of music to the power of the doctor-patient relationship. It celebrates the heroic efforts of our doctors and the qualities of our patients. It is meant to invoke a sense of pride in what we do and to inspire.

We can be heroes

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"Thank you" - Led Zeppelin, 1969

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And so today my world it smiles
your hand in mine we walk the miles
Thanks to you it will be done for you to me are the only one

There's no better way to wrap up the year and welcome the summer holidays than by showing appreciation to the doctors, the patients and the discipline of rheumatology. This very special edition of NewsRheum was imagined during one of my self-indulgent late-night music playlists listening sessions; which happened upon the haunting melody and inspiring lyrics of "Heroes", by the late, great David Bowie. It was time to remind each other why we do what we do. Why we keep on, keeping on. Why we should remain optimistic and committed; and never stop amplifying the voices of our courageous patients.

The patient perspective is more than just a subjective assessment of their disease. It can be an integral clinical and research tool, one that has proven to be an excellent measure of treatment response and disease outcomes. Rheumatology takes the lead amongst medical specialties in promulgating the development and use of patient-reported outcomes (PROs) in assessing disease. This is in part due to the lack of clear and specific clinical or laboratory markers to monitor disease progress, but also because the majority of the systemic rheumatic diseases have a chronic course, often burdened by disabling pain or deformities, limiting function.

Despite some being widely recognised, like the health assessment questionnaire (HAQ) and SF-36, there are hundreds of others that have been trialed across various conditions; and the search for the optimal PRO measure (PROM) remains an important goal within the rheumatology community. Incorporating PROMs routinely in the clinical setting has its challenges. It can be time-consuming, many are geographically or culturally inappropriate, it relies on the literacy and understanding of the patients, and may not always correlate with measures of disease activity or the doctor's impression of disease. This, however, should not discourage the use of these measures in daily practice, wherever feasible. The incorporation of technology, the use of digital diaries, has also empowered patients to track their own disease progress, and allowed them to become more involved in their management, something that should be encouraged.

The patient journeys presented in this edition of NewsRheum all have a common thread; they exemplify the strength and determination of our patients. They demonstrate the bonds and relationships that we make with our patients, and the impact that they can have on us. The lessons we learn through experience, which are invaluable, and the knowledge attained, that is often more memorable than that which we read in a textbook or journal article.

The same can be said for the humble giants in the field of rheumatology; who not only teach, but also inspire.

You will see that each article is headed by a song which embodies the patient-doctor connection. Music has the power to transform, to heal, to break barriers and to unify people. It can level the playing field – whether you're a studied physician, a farmer's daughter from rural Eastern Cape, a young boy or girl discovering your passion and shaping your future, or a young woman with undiscovered artistic talents.

In the end, all that is left to be said is thank you to the authors (doctors and patients) of this issue for their exceptional work and beautiful stories shared.

In the immortal words of Coldplay - "Lights will guide you home, and ignite your bones, I will try to fix you".

"Rocketman" - Sir Elton John

Professor Ralph Schumacher Jr (1933-2017)

A giant clinician, teacher and scientist rheumatologist

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Prof. Schumacher was the par-excellence physician–scientist, best known for using cutting-edge laboratory techniques to pursue his interest and fascination with synovium and synovial fluid in health and disease.

For this issue of News Rheum, our editor, Dr. Kavita Makan, suggested I write a piece on one of the past giants of rheumatology. Of course, there have been several great clinician-scientists who have contributed in a major way to our understanding and practice of rheumatology in modern times. I chose to write about Professor Ralph Schumacher, Jr., who was Professor of Rheumatology at the University of Pennsylvania and the Philadelphia VA Hospital, USA. My reason for choosing him is that apart from his contribution to rheumatology, he had a personal connection with South Africa, but more about that in a while.

Professor Schumacher was born in Montreal and did his residency and fellowship at Wadsworth VA Hospital/ UCLA. He then left his training to work as the only rheumatologist in the U.S. Air Force in California. After completing rheumatology and pathology fellowships at Boston's Robert B. Brigham and Peter B. Brigham hospitals, Professor Schumacher joined the University of Pennsylvania faculty in 1967, promoted to full professor in 1979 and where he spent almost 50 years and publishing more than 550 papers!

Prof. Schumacher was the par-excellence physician-scientist, best known for using cutting-edge laboratory techniques to pursue his interest and fascination with synovium and synovial fluid in health and disease. He made many seminal observations and discoveries on synovium structure and function and synovial fluid analysis, especially in crystal arthropathies and other inflammatory joint disorders. He described the utility of synovial biopsy in diagnosis of rheumatic disorders, including the histopathology of very early undifferentiated synovitis. He pioneered the use of electron microscopy to study synovium and combined with light microscopy he described normal synovial structure including the absence of a basement membrane in synovium, synovial lining cell types and function and cell-cell interactions and pathophysiology of synovial inflammation. These findings had far-reaching effects on our current

Figure 1. Professor Ralph Schumacher at work with an electron microscope

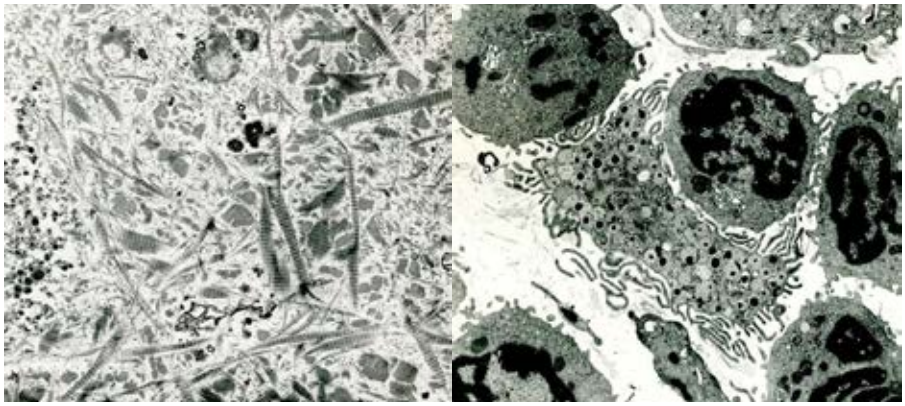

Figure 2. (a) Electron microscopy of synovium a) thin and unusual thick synovial collagen X 10000 magnification, (b) synovial macrophage reaching out with dramatic processes to enfold a lymphocyte X 7500 magnification.

understanding of immunopathogenesis of rheumatic diseases, detection of early disease and modern targeted pharmacologic therapies.

Professor Schumacher was a leading expert on synovial fluid analysis, building on the earlier work of Hollander and McCarty from the early 1960s on microscopic identification of crystals in synovial fluid. He described various types of crystals that induce inflammation, including monosodium urate, calcium pyrophosphate dihydrate (CPPD), calcium oxalate, and calcium hydroxyapatite (HA) crystals. In addition, he reported and described other particles and crystals found sometimes in synovial fluid like cholesterol crystals corticosteroid crystals, lipid droplets and talc particles. A strong global advocate of synovial analysis in diagnosis and treatment, he, together with Dr Antonio Reginato, published an atlas on synovial fluid analysis and microscopy.

One of Professor Schumacher's other passions was to connect with the global rheumatology community. He mentored over 200 scholars from over 30 countries worldwide and frequently hosted visiting scholars from various countries, including Venezuela, Ecuador, Brazil, Argentina, Chile, Mexico, Colombia, Thailand, China, Taiwan, and Japan. He assisted foreign trainees to establish centres of excellence in their home countries. Frequent visits to Central and South America led to the creation of the Pan American League of Associaciones for Rheumatology (PANLAR)-Schumacher Award to support Latin American junior researchers and for him to become the founding Editor-in-Chief of the official PANLAR journal, Journal of Clinical Rheumatology in 1995.

Finally, the South African connection with Professor Schumacher. A guest speaker at the 1999 AFLAR Congress in Cape Town hosted by Professor Asgar Kalla, he also travelled to other centres in the country. I had the good fortune of hosting him in Gauteng, visiting Rheumatology centres in Johannesburg and Pretoria. As a

Figure 3. (a) cover of Atlas of Synovial Fluid Analysis and Crystal Identification (complimentary copy presented to me by Professor Schumacher on his visit to South Africa), (b) photomicrograph of a monosodium urate crystal from the book.

Figure 4. ILAR 2001 (from L to R): Ralph Schumacher Jr, Asgar Kalla, Girish Mody, Mohammed Tikly.

then middle-grade rheumatologist, it was inspiring for me to witness this astute clinician in action on a case presented by Dr Ingram Anderson of a young woman initially diagnosed as having axial spondyloarthritis. The initial diagnosis had been based on scalloping of the sacroiliac joints but significantly with no inflammatory back symptoms, persistently normal acute phase reactants and a raised serum calcium.

Professor Schumacher went on to give an off-the cuff overview and personal experience of the rheumatic features of the underlying cause, namely primary hyperparathyroidism.
Two years later, Professors Girish Mody and Asgar Kalla and yours truly were honoured by Professor Schumacher to speak in a themed session on infections and rheumatic diseases, at what was sadly to be the last of by the ILAR quadrennial congresses, in Edmonton, Canada.

Further recommended reading

1. Henkel G. Triple-Threat Rheumatologist H. Ralph Schumacher, Jr., MD, Has a Zest for Research. https://www.the-rheumatologist.org/article/triple-threat-rheumatologist/
2. About Ralph Schumacher: Synovial Biopsy, Synovium, Synovial Fluid & Arthrocentesis . https://www.med.upenn.edu/synovium/sfanalysis.shtml
3. Baker, J and Baker DG. H Ralph Schumacher. Rheum Dis Clin N Am 50 (2024) 103–111 (Special issue: 'The Giants of Rheumatology')

"I am grateful" - Spirit of Praise, Mmatema

Rheumatoid arthritis patient story: Angelina Gcasamba

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Today, Angelina Nokwanda Gcasamba lives a full life, travelling between her son's house in Cape Town and her farm in Qora, where she looks after two disabled young relatives.

As a child, Angelina Nokwanda Gcasamba remembers boiling up "umuthi" of roots and leaves to apply as poultices to the swollen joints of her father, Adolpus Gcasamba, on the family farm in Qora near Butterworth in the Eastern Cape. Angelina, born in 1953, was the fourth of eight children. Her father Adolphus worked as a railway worker in Caledon, and became unwell in the early 1970's: The belief was that he had stepped on something at work and injured himself, causing swelling and pain to the feet which soon spread to the rest of the body. Angelina now recognises this as the start of his rheumatoid arthritis (RA).

In 1972 Adolphus lost his job because he struggled to walk and use his hands, and he returned to his wife and family in the Eastern Cape. Around this time, Angelina's older sister (Adolphus' firstborn) Louisa Bekeka developed arthritis whilst training as a teacher at Clarkebury Institute near Mthatha. Angelina remembers Louisa being given special dispensation to take her morning bath in warm water rather than the standard cold water to ease her stiff painful joints. Despite her difficulties, Louisa graduated. Adolphus' arthritis worsened, and he died in 1975, leaving the family to survive on Louisa's teacher's salary.

Angelina reports that over time, all eight offspring (six girls and two boys) in the family developed RA. Four of the eight lived in the Eastern Cape without access to disease modifying antirheumatic drugs, using corticosteroids for many years– and all four have died of diabetes and its complications. The remaining four sisters live in the Western Cape, with RA ranging from mild to severe. Angelina moved to Cape Town in 1988, where she worked as a domestic worker and raised two sons. Her own RA started in 1992, aged 39, and was diagnosed in 2002, and treated with sulfasalazine, chloroquine, and later methotrexate. Prednisone, sometimes 12 tablets a day (60 mg) was her only defence against the pain and stiffness.

Over the years, Angelina's arthritis worsened, requiring Darrach's fusion of both wrists and shoulder replacement surgery, amongst the first at Groote Schuur Hospital. She developed large "lumps" (rheumatoid nodules) on her elbows. By 2015 she needed assistance with dressing, washing, and grasp and struggled with all daily tasks, and reluctantly became wheelchair-bound. When she left Cape Town and returned to the farm in Qora, she remembers family members lifting her out of the car and into the wheelchair. She and the family believed that she would be buried within a year.

In early 2016 she was given rituximab, and "this drip cleaned everything". Her stiffness and swelling rapidly resolved, and she was able to walk without assistance. Her elbow nodules disappeared, and she felt the fatigue associated with her RA lift. Over the last 8 years she has received rituximab when her arthritis flares, or as she put it, "…when her tiredness returns". To date she has received five infusions of low dose rituximab (1000mg) (at 8-16 month intervals), all with good effect.

Her current clinical disease activity index (CDAI) is 7 indicating low disease activity, and she no longer requires prednisone. She has recently undergone successful

Figure 1. Angelina outside her home in Qora. She says "I'm the only lucky one [of the siblings] to reach 70 years. I can't thank you enough for that."

Figure 2. Mrs Eunice Thembisa Mahadev (front row, seated) aged 97, surrounded by her eight children including Angelina, all of whom developed RA.

cataract surgery, proclaiming that the "world is now bright". Today, she lives a full life, travelling between her son's house in Cape Town and her farm in Qora, where she looks after two disabled young relatives. Her days are now meaningful because she grows spinach, cabbage, mielies and pumpkin; keeps chickens, pigs and goats; and attends community functions independently. She looks forward to December when up to 32 family members gather at her house for the holidays. She has much to celebrate – as she says, "I can't believe I am still alive".

References

1. Brighton S, De la Harpe A, Van Staden D, Badenhorst J, Myers O. The prevalence of rheumatoid arthritis in a rural African population. The Journal of rheumatology. 1988;15(3):405-8.
2. Adebajo A. Rheumatoid arthritis: a twentieth century disease in Africa? Arthritis & Rheumatism: Official Journal of the American College of Rheumatology. 1991;34(2):248-9.
3. Hodkinson B, Musenge E, Ally M, Meyer PWA, Anderson R, Tikly M. Response to traditional disease-modifying anti-rheumatic drugs in indigent South Africans with early rheumatoid arthritis. Clinical rheumatology. 2012;31:613-9.

References 4-12 available on request.

Learning points

- Early reports that RA is rare, and mild, in rural black South Africans is somewhat inaccurate.[1] This impression was likely due to underreporting and sampling errors, and more recent studies have confirmed that RA is prevalent, and can be severe amongst sub-Saharan SA patients.[2,3]
- A family history of RA is a strong risk factor for RA,[4] with first-degree relatives of patients with RA carrying a two to five times higher risk of developing the disease compared with the general population. In particular, the HLA-DRB1 gene, and in particular a key sequence of five amino acid sequence motif in residues 70–74 of the HLA-DRβ chain, the so-called shared epitope, is strongly associated with RA in sub-Saharan Black Africans.[5]
- Rheumatoid nodules are a marker of severe longstanding seropositive RA.[6] There are reports of resolution of nodules and other extra-articular complications of RA with rituximab.[7]
- Low dose rituximab (1000mg) has been shown to be almost as effective in RA as high dose rituximab (2000mg), and is a cost-saving approach in resource constrained settings such as ours.[8] Many patients achieve low disease activity lasting for more than six months, and re-infusing at flare rather than every 6 months is an acceptable approach. There is growing evidence that "ultralow dose" rituximab (500mg) may also be effective.[9]
- A patient failing conventional synthetic disease modifying antirheumatic drugs (DMARDs) requires biologic or targeted synthetic (b/ts-)DMARD therapy to control disease activity.[10] A good response to one of these therapies is cost-effective, and might allow improvement in pain, fatigue, disability and health-related quality of life scores, bringing benefit to patients, their families and community.[11] We need to continue to work towards better access to b/tsDMARDs in both state and private healthcare settings.[12]

“If you can’t beat them” - Queen

Granulomatosis with polyangiitis: Jordan Pillay’s journey

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“My sickness or disease didn't get the better part of me. Because I've fought much to come out victorious.”

Hi there...This is a short story about my Journey.

My name is Jordan Pillay. I am 14yrs old. On December 21st 2023 I suddenly fell ill by just experiencing a high temperature, redness in eyes and a dry cough. Upon seeing this my parents rushed me to hospital where I was then taken tests on. I did not understand what was happening to me or my body. I just kept praying everything be okay. I was then taken to Inkosi Albert Luthuli Hospital where I was admitted on the 29th of January 2024. Not understanding what was going on. I just waited patiently. My health deteriorated much. I was then gone to high care because I couldn't breathe. I didn't know what was going on and then I was placed in ICU fighting for my life. Unable to walk or move. My journey started 1st of February 2024 till March 25th where I was then taken from the ICU to the ward. I had 2 drain pipes put inside of my both lungs. I was on a life support machine (ventilator). I couldn't move or speak. I had a tube placed in my throat. It was the most devastating days of my life. I'm grateful to be alive with everything I've faced. My sickness or disease didn't get the better part of me. Because I've fought much to come out victorious. I've had the most loving care of doctors and nurses at the hospital who took care of me while I was unconscious.

I'm thankful to God for getting me through this walk and journey in my life. And to those beautiful kind hearted people who prayed for me and didn't give up on me no matter what a big thank you from the bottom of my heart. I'm now healthy and strong. I've recovered my full abilities and my weight is well. Although I don't or didn't understand what was a GPA disease that I've had. One thing I do know is that there is a God who got me out of everything I've been through. His name is Jesus and no matter what I've experienced, faced or been through today I stand here believing for better days ahead and I'm looking forward to seeing all my friends at school in the new year. I'm happy to be a living walking testimony to many thousands out here.

So today I leave this small encouragement:
Whatever you face in life remember there is always light at the end of the tunnel. God loves you and He is always with you. Never give up.
Always stand tall like a tree.

God bless you.
Jordan Pillay.

Granulomatosis with polyangiitis (GPA), formerly known as Wegener's granulomatosis, is a rare, necrotising vasculitis affecting small to medium-sized vessels.

One of the antineutrophil cytoplasmic antibody (ANCA)–associated vasculitides (AAV), GPA is characterised by granulomatous, necrotising inflammatory lesions most commonly affecting the upper and lower respiratory tracts, and the kidney.

Presentation can be variable and can involve multiple different systems. The AAV are associated with significant morbidity and mortality, and a high index of suspicion is required to accurately and timeously diagnose patients.

From the first case described by German medical student Heinz Klinger in 1931, there has been much advancement in the recognition and management of GPA.
Here we describe a particularly challenging case of GPA with muti-system involvement.

14-year-old JP is a grade nine scholar from Durban. He presented to his local hospital in November 2023, reporting a dry cough and runny nose (clear discharge) for a few days. At that visit he was treated with antibiotics for a suspected lower respiratory tract infection.

Even after completing the course of treatment, Jordan did not feel any better. He went back to hospital a month later, this time because of fevers, painful red eyes, blurred vision and pain in several small and large joints for three weeks. He still had the dry cough, and now also complained of fatigue and dyspnoea on moderate exertion.

He was reviewed by the ophthalmologists and diagnosed with bilateral anterior uveitis. Treatment with topical steroid drops was initiated, and JP was referred to the rheumatology unit for further evaluation and management.

On examination, his blood pressure was 108/69mmHg, pulse was 120 beats per minute and he was apyrexial (temperature 36.2 degrees Celsius). His respiratory rate was 22 breaths per minute. There were no petechiae, purpura or skin ulcers. There were no mucocutaneous features typical of systemic lupus erythematosus. Coarse crackles were auscultated throughout both lungs. Both eyes were red and left wrist synovitis and volar tenosynovitis was noted. The urine dipstick showed 2+ blood and 2+ protein.

Some of the relevant laboratory investigations that were available at his initial visit are tabulated below **(Table 1)**. Of note the renal function and haemoglobin were normal, the c-reactive protein was elevated at 65mg/L and the anti-proteinase 3 antibody was positive in high titre (156 U/ml). The anti-nuclear antibody was negative and the rheumatoid factor was low-titre positive.

Table 1. Laboratory results

Laboratory Test	Result	Normal range
Haemoglobin (g/dL)	15.6	11.5 – 13.5
White cell count (x 10^9/L)	10.7	4.0 – 11.0
Platelets (x 10^9/L)	252	150 - 450
Urea (mmol/L)	2.7	2.1 – 7.1
Creatinine (µmol/L)	47	49 - 90
C-reactive protein (mg/L)	65	<10
Rheumatoid factor (IU/mL)	68.0	
Anti-nuclear antibody	Negative	
Anti-proteinase 3 ANCA antibody (U/mL)	156	

A chest radiograph **(Figure 1)** showed diffuse lung infiltrates with cavities bilaterally.

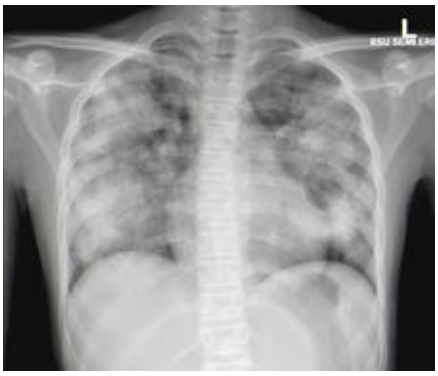

Figure 1. Initial chest radiograph showing diffuse lung infiltrates and cavities

A diagnosis of GPA was made: JP had a nasal discharge, lung infiltrates with cavities, suspected renal involvement (microscopic haematuria), uveitis and arthritis. The anti-proteinase 3 antibody was also strongly positive. Thus, the 2022 American College of Rheumatology/European Alliance of Associations for Rheumatology classification criteria for granulomatosis with polyangiitis was met.[1]

To induce remission, JP was treated with intravenous methylprednisolone 500mg daily. On the third day of treatment, JP's condition deteriorated rapidly. He was dyspnoeic on minimal exertion, and his oxygen requirements steadily increased. An acute drop in the haemoglobin from 15.6g/dL on admission to 6.1g/dL was noted.

JP was intubated and ventilated in the intensive care unit (ICU). A high resolution computed tomography (HRCT) scan of the lungs showed diffuse interstitial and alveolar consolidation in both lungs, with thick-walled cavities bilaterally and mutifocal peripheral solid nodules of varying size. The main considerations at the time were infection and pulmonary haemorrhage, with the overall features strongly suggesting pulmonary involvement with GPA. During the intubation blood-stained frothy secretions were noted, which supported the presence of diffuse alveolar haemorrhage.

Two days later, while on the ventilator,

JP developed bilateral spontaneous pneumothoraces, requiring the insertion of intercostal drains.

His stay in ICU was a tumultuous one. He developed several bouts of nosocomial sepsis. A multidrug-resistant *Acinetobacter baumannii* was repeatedly cultured from the intercostal drain fluid and *Candida paraspilosis* was isolated in endotracheal aspirates.

Inotropic support, in addition to several courses of antibiotics and antifungal treatments, was necessary to treat septic shock. Shock doses of hydrocortisone were continued throughout his ICU stay.

There was agreement among the multidisciplinary team members treating JP at the time (rheumatologist, intensivist, pulmonologist) that, due to the severity and rapid progression of his disease, and with life- and organ-threatening manifestations, JP needed aggressive treatment. However more definitive immunosuppression to treat the GPA according to convention[2] was delayed due to the recurrent pneumonias and urinary tract infections.

After a review of the literature available, a decision was taken to try intravenous immunoglobulin therapy (IVIg).[2] JP received IVIg at a dose of 400mg/kg/day for five days. Unfortunately, there was not much clinical improvement. The haemoglobin continued to drop, requiring repeated blood transfusions, and effective ventilation continued to be challenging due to stiff, non-compliant lungs. The pneumothroaces also rapidly reaccumulated, and the intercostal drains remained in situ for several weeks.

During his ICU stay, JP developed rapid, repeated eye movements and brief muscle jerks in the arms and legs. A diagnosis of opsoclonus-myoclonus syndrome (OMS) was made by the neurology team. He also developed bilateral foot drops, attributed to critical illness neuropathy. The development of these complications further underscored the urgent need for immunosuppression for this patient.

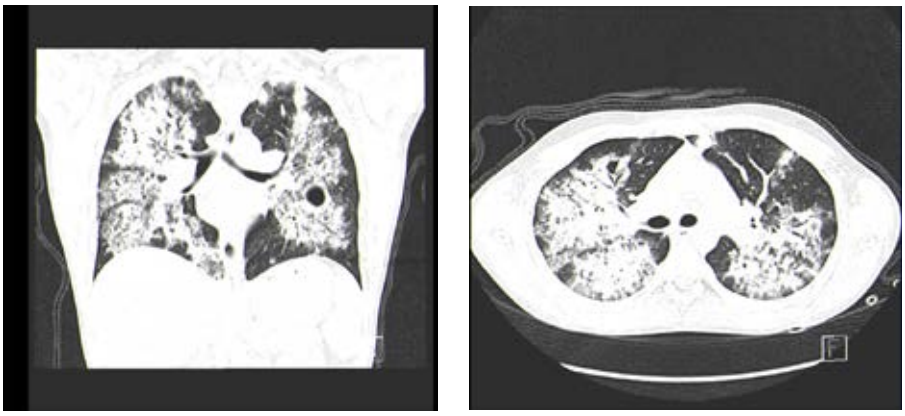

Figure 2. Images from the HRCT chest showing diffuse interstitial and alveolar consolidation, cavities

After more than a month, JP was extubated. The intercostal drains had been removed, he was coping well off the ventilator, and we were confident that the infections had been effectively treated.

He received a further course of methylprednisolone, 250mg for three days, about five weeks after the initial pulse with steroids.

The team took a combined decision, after discussion with JP's parents, to start cyclophosphamide. He received 500mg intravenously and was given a second dose two weeks later. Trimethoprim/sulfamethoxazole was started as prophylaxis against *Pneumocystis jirovecii* pneumonia.

Jordan just after his ICU stay

Marked clinical improvement followed. The lung infiltrates improved and eventually cleared. The haemoproteinuria and arthritis resolved.

JP continued follow up as an outpatient at the rheumatology clinic. In total he received nine doses of cyclophosphamide. The chest radiograph, shown in **Figure 3**, shows resolution of the abnormalities seen on first presentation. He is doing very well. The neuropathies are improving. The cough has resolved, his lungs remain clear and he has no new symptoms.

JP is currently receiving mycophenolate mofetil to maintain remission. A recent HRCT scan of the chest showed resolution of the perihilar opacification

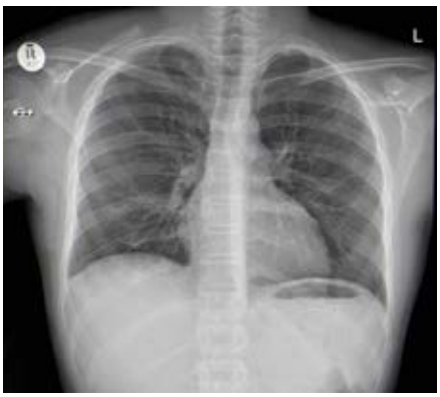

Figure 3. Chest radiograph, following induction therapy, showing resolution of the initial findings.

and the cystic changes previously seen in both lung fields, with resultant perihilar fibrosis.

JP is back to being a regular healthy teen. He has started fishing again with his dad, and has been regaling friends and family with stories of his latest big catch. Though he has missed a year of school, JP is eager to start grade 9 in the new year.

References

1. Robson JC, Grayson PC, Ponte C, Suppiah R, Craven A, Judge A, et al. 2022 American College of Rheumatology/European Alliance of Associations for Rheumatology classification criteria for granulomatosis with polyangiitis. Ann Rheum Dis. 2022 Mar;81(3):315-320. doi: 10.1136/annrheumdis-2021-221795
2. Benavides-Villanueva F, Loricera J, Calvo-Río V, Corrales-Selaya C, Castañeda S, Blanco R. Intravenous immunoglobulin therapy in antineutrophil cytoplasmic antibody-associated vasculitis. European Journal of Internal Medicine Volume 117, November 2023, Pages 78-84. doi: 10.1016/j.ejim.2023.06.021
3. Stone JH, Merkel PA, Spiera R, Seo P, Langford CA, Hoffman GS, et al. Rituximab versus cyclophosphamide for ANCA-associated vasculitis. N Engl J Med 2010; 363: 221–32. doi: 10.1056/nejmoa0909905
4. Chung SA, Langford CA, Maz M, Abril A, Gorelik M, Gyatt G, et al. 2021 American College of Rheumatology/Vasculitis Foundation Guideline for the Management of Antineutrophil Cytoplasmic Antibody-Associated Vasculitis. Arthritis & Rheumatology / Volume 73, Issue 8 / p. 1366-1383. doi: 10.1102/art.41773
5. Vernovsky I, Dellaripa PF. Pneumocystis carinii pneumonia prophylaxis in patients with rheumatic diseases undergoing immunosuppressive therapy: revalence and associated features. J Clin Rheumatol 2000; 6: 94–101. doi: 10.1097/00124743-200004000-00007

Discussion points

- This case describes GPA with a severe, rapidly progressive disease course, with life- and organ-threatening manifestations. While the need for aggressive immunosuppressive therapy was clear early on, the development of difficult-to-treat nosocomial infections was a major challenge to instituting definitive therapy. A team approach was helpful to ensure that all aspects of the patient's condition were carefully considered, and that the timing and choice of immunosuppression was appropriate. Having good ICU support was critical in achieving a good outcome for this patient.
- A typical presentation of GPA is with cough, fevers, fatigue and weight loss. Classic chest radiograph findings can include cavitations and lung infiltrates. In our environment, where tuberculosis is endemic, this must be considered in the differential of such a presentation. Our patient was screened and tuberculosis was excluded.
- Together with intravenous or high-dose oral glucocorticoids, rituximab and cyclophosphamide have both been used to induce remission in GPA. Rituximab has been shown to have similar efficacy to cyclophosphamide for induction of remission in patients with GPA.[3] The drug is considered less toxic than cyclophosphamide, and especially in younger patients, where there is a concern about future infertility with cyclophosphamide, rituximab is conditionally recommended over cyclophosphamide.[4] However, in a resource-limited environment such as ours, cyclophosphamide remains an excellent choice of drug to induce remission. The lower cumulative dose used in newer treatment regimens (such as the one used to treat our patient) is considered less toxic. The choice of drug should be a shared decision between the patient and the treating team.
- For patients with GPA who are receiving rituximab or cyclophosphamide for remission induction, prophylaxis to prevent *Pneumocystis jirovecii* pneumonia is conditionally recommended and should be considered.[4-5]
- Even though our patient did not respond positively, IVIg has been shown in the literature to be a safe and effective treatment option for refractory GPA, or in the presence of active infection where standard immunosuppressive treatments cannot be used.[2,4]
- OMS is an immune-mediated neurologic disorder. In young children it is most often triggered by the presence of a tumour but can also occur on its own or following a bacterial or viral infection.

"Never gonna give you up" Rick Astley

The story of two little heroes with juvenile idiopathic arthritis

Dr Priya Ambaram
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"With the best healthcare, medication and caregivers, I managed to rise above my diagnosis. I will not quit, and physical exercise will stay part of my daily life."

We as doctors sometimes don't realize the journey of our patients, the daily struggles they go through, for example simple aspects of their illness like the morning stiffness they experience that impact their lives more than we know, the fact that they cannot partake in sports and the upset that comes with that because all their friends are able to run, play soccer or hockey or netball but they are unable to.

I would like to highlight the journey of two of my patients with juvenile idiopathic arthritis (JIA) from the onset of symptoms to their diagnosis, clinical symptoms they presented with, their disease course and outcome. They have both shown remarkable improvement in their symptoms. However, it took a long time for both to achieve improvement and have a good quality of life.

PATIENT 1 - MEGAN

Initial presentation

My first patient, Megan is known to me since June 2021 when she was 10 years of age.

She presented amid our 3rd COVID-19 wave when the Delta variant was the dominant strain in the country. She had a 4-week history that started with upper respiratory tract symptoms (cough, sore throat) and thereafter followed a week later with fever, difficulty in walking and a rash that would come and go with her fever. She was initially thought to have a bacterial upper respiratory tract infection and was treated as such. She, however, did not improve and required transfer to ICU.

She was having persistent temperature spikes, she had generalised significant lymphadenopathy, with signs of a left pleural effusion as well as a pericardial effusion. She also had arthritis in her left ankle.

Diagnosis

Due to the timing of her presentation, she was assumed to have MIS-C (Multisystem inflammatory syndrome in children) associated with COVID-19 or Paediatric inflammatory multisystem syndrome (PIMS) temporally-associated

with SARS-Cov-2 infection. Megan's inflammatory markers were significantly raised - her ferritin was 52 650 ng/ml (normal is 10-56ng/ml) and her ESR was 84mm/hr and CRP 261 mg/l. What was against the diagnosis of MIS-C was that her COVID-19 PCR as well as her COVID antibodies were both negative. Her Interleukin 6 levels were 479.8pg/ml (normal <6.4pg/ml). She was given polygam and 3 doses of intravenous steroids (treated as a MIS-C). However, her symptoms did not resolve. Her symptoms including fevers, swelling of her joints and her rash persisted. After ruling out infections as well as malignancy, she was diagnosed with systemic JIA (SJIA) complicated by macrophage activation syndrome (MAS).

Figure 1. Megan admitted to hospital at diagnosis

Disease course

She was started on treatment for her MAS and arthritis, and her initial treatment included cyclosporine, prednisone and methotrexate. Her arthritis worsened and she required intra articular triamcinolone hexacetonide (Lederlon) injections of her wrists and knees. She was soon started on treatment with Actemra (tocilizumab) but did not cope with subcutaneous injections, so we opted for 2 weekly infusions which she found less traumatising. Also, her symptoms including the rash and fevers didn't settle on the subcutaneous injections but improved on the infusions. She had infusions until November 2022 (for more than a year) after which she was ready to transition to subcutaneous injections. I have managed to wean her off all other disease modifying agents, and she is currently only on Actemra injections and doing great.

Outcome

Although Megan who is now 13 and a half years, improved after commencing treatment, she only went into remission in July 2022, more than a year post diagnosis. Megan is an avid sportsman and what she was most upset about, was the setback that her diagnosis put on her sports activities. She slowly got back to her sports and started competing again in sprinting, hockey and netball. She was awarded trophies for Best Senior Sprinter and best achievement in hockey this year.

What Megan thinks of her illness

"SJIA caused me to fear needles, hospitals and blood tests. It affected me mentally and physically. I had to endure bullying because of my "prednisone" face. But with the best healthcare, medication and caregivers, I managed to rise above my diagnosis. I will not quit, and physical exercise will stay part of my daily life."

PATIENT 2 - SPHAMANDLA

Initial presentation

My second patient, Sphamandla was referred to us at Chris Hani Baragwanath Academic hospital in 2017 when he was 6 and a half years old. The history was that of intermittent symptoms that started around 2 years of age. At the time he had a swollen right wrist which seemed to have resolved on its own. Thereafter he was seen at the referring hospital for a stiff neck (which was treated as torticollis) as well as swollen wrists. He was only given anti-inflammatory medication for this. He was subsequently referred to our clinic four months later. When we had seen him, he had severe restriction of his C spine as well as bilateral swollen wrists with synovial cysts.

Diagnosis

In 2013, when Sphamandla was 2 years old, he was treated for suspected tuberculosis. He had completed 6 months of TB treatment. So, on his initial presentation to us, we had done extensive investigations to rule out the diagnosis of TB arthropathy. We then diagnosed him as a Juvenile Idiopathic arthritis. Since his arthritis progressed to involve more than four joints after the first six months of the disease, he would be classified as an oligoarticular extended type of JIA.

Figure 2. Sphamandla

Disease course

Sphamandla's disease has had a turbulent course. He was started on methotrexate, soon thereafter plasmaquine was commenced. In 2018, he had 2 episodes of pneumonia and was failing to gain weight. So, TB investigations were redone. The chest X-ray did look suspicious and even though other investigations were negative, we opted to retreat him as a possible reactivation TB. A lymph node biopsy was also done to rule out malignancy and TB. Salazopyrine was then added to his treatment. During his illness, he received multiple intermittent doses of steroids (intravenously and orally). The restriction in his C spine worsened, and imaging showed diffuse cervical facet joint ankylosis. In 2019, he unfortunately had an anterior

wedge compression fracture of his T8 vertebra, which is most likely due to the increased cumulative doses of steroids he has required. To make matters worse, amidst all his complications, his mum was also diagnosed with discoid lupus. On a more positive note, once we had Enbrel (etanercept) available for us to use at our hospital, we started him on Enbrel in September 2019.

Outcomes

He has been a very slow responder to Enbrel and took about 18 months to achieve inactive disease. We had no other biologic agents available at our hospital at the time, so we continued with Enbrel. His symptoms did improve gradually. He currently experiences no morning stiffness, is not in pain, and is able to attend school regularly and partake in sports. He also receives 6 monthly bisphosphonate for his steroid induced osteoporosis. His mom is also doing well on treatment after her diagnosis.

What Sphamandla thinks of his illness

"It took me a long time to feel better, but I feel great. I can run and I can even play soccer. My teachers are even happy with my progress. This makes me happy."

DISCUSSION

JIA is a group of chronic heterogenous disorders of unknown aetiology that presents with joint inflammation and persists for at least six weeks in children less than 16 years of age.[1] It is the most common chronic musculoskeletal condition in children and the most common cause of musculoskeletal disability. It is estimated that approximately 3 million children and young adults worldwide suffer from JIA. The prevalence rates range from 3.8 to 400 cases per 100,000 children. Girls are consistently found to be at a higher risk than boys.[2] Using Stats SA population statistics from 2020, it was estimated that between 19000 -75000 children suffer from JIA in South Africa.

JIA is classified into 7 different types according to the International League of Associations for Rheumatology (ILAR) classification:

Figure 3. December 2023 Arthritis Clinic - doing great

Figure 4. Sphamandla - much happier child, 2024

1. **Oligoarticular JIA:** It is the most common type of JIA. This type can be further divided into two subtypes:
   - **Oligoarticular Persistent JIA:** This subtype affects four or fewer joints throughout the entire course of the disease.
   - **Oligoarticular Extended JIA:** This subtype initially affects four or fewer joints in the first six months of the disease, but later extends to involve more than four joints.
2. **Polyarticular JIA RF positive** and
3. **Polyarticular JIA RF negative:** These 2 types affects five or more joints in the first six months of the disease. It is divided based on the presence of rheumatoid factor in the blood.
4. **Enthesitis-Related Arthritis (ERA):** This type involves inflammation of the entheses, the sites where tendons or ligaments insert into bone. It often affects the lower limbs and the spine.
5. **Psoriatic Arthritis:** This type is associated with psoriasis, nail changes and children usually present with "sausage shaped fingers" also known as dactylitis.
6. **Systemic JIA (sJIA):** The most severe type of JIA characterized by fever, a typical salmon pink rash that comes and goes with the fever, lymphadenopathy, hepatomegaly and/or splenomegaly as well serositis in addition to arthritis.
7. **Undifferentiated Arthritis:** This type does not fit into any of the above categories or may fit into more than one category.[1]

An interesting point is that the above classification came about after a meeting was held by the Classification Taskforce of the Pediatric Standing Committee of ILAR when this classification was proposed at a meeting held in Durban, South Africa in 1997.[1]

Megan, my first patient presented with the most severe type of JIA, the systemic type and Sphamandla the Oligoarticular extended type of JIA. The disease course for sJIA can be variable, and some patients may experience flares or complications, one of which that is very concerning is MAS, which is what Megan presented with. However many patients can achieve inactive disease and maintain a good quality of life especially if treated early. The oligoarticular extended JIA is generally favourable with appropriate treatment. Most patients will achieve inactive disease if treated, although some may experience joint damage or other complications, similar to Sphamandla.[3]

Conclusion

The song "Never gonna give you up" by Rick Astley resonates with me with both my patients….
I didn't want to give up,
I didn't want to let them down
I didn't want to tell a lie and hurt them
It has taken a long time for both my patients to get to this point and along the way, I had to be honest, patient and persevere on and be hopeful that with my management plan their symptoms will improve and so they did. Understand your patients' journey and support them on their journey. Each patient's journey is different.

References

1. Petty RE, Laxer RM, Lindsley CB, Wedderburn L, Fuhlbrigge RC, Mellins ED. Textbook of Pediatric Rheumatology. 8th ed. Elsevier; 2020.
2. Al-Mayouf SM, Al Mutairi M, Bouayed K, et al. Epidemiology and demographics of juvenile idiopathic arthritis in Africa and Middle East. Pediatr Rheumatol. 2021;19:166.
3. Onel KB, Horton DB, Lovell DJ, Shenoi S, Cuello CA, Angeles-Han ST, et al. 2021 American College of Rheumatology Guideline for the Treatment of Juvenile Idiopathic Arthritis: Recommendations for Nonpharmacologic Therapies, Medication Monitoring, Immunizations, and Imaging. Arthritis Rheumatol. 2022;74(4):570-585.

NB Permission was given by the parents of both patients to mention their names as well as to use the pictures provided.

"Shine on you crazy diamond" - Pink Floyd
The journey of a patient living with systemic sclerosis

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In memory of Natasha May. 1975 – 2024

This article highlights two aspects of Natasha's journey with systemic sclerosis (SSc):

- Severe peripheral vasculopathy complicated by refractory skin ulcerations
- Orofacial appearance and oral health

Natasha's disease course

Natasha was diagnosed with limited cutaneous systemic sclerosis (lcSSc) in 2001, at the age of 26 years. She had suffered from severe Raynaud's phenomenon of her hands and feet for four years prior to her diagnosis. Gastroesophageal reflux, and oral sicca symptoms were reported. She was a smoker. Physical examination demonstrated sclerodactyly and telangiectasias on her lips, face, arms and hands. Laboratory evaluation revealed the presence of anti-centromere antibodies (ACA). She was initially managed with a proton pump inhibitor and calcium channel blocker for her reflux symptoms and Raynaud's, respectively. Given her risk for vascular disease, a statin and aspirin were later added as adjunctive therapies.

In 2004, Natasha developed acute right wrist drop and left foot drop. Mononeuritis multiplex was confirmed on nerve conduction studies. Her clinical pathology resolved following a course of intravenous cyclophosphamide and oral corticosteroids. Between 2003 and 2015, she developed progressive flexion contractures of her fingers and recurrent episodes of excruciatingly painful digital ulcers (DUs). These were complicated by calcinosis and eventual critical ischaemia resulting in gangrene. Despite advising on lifestyle measures and use of maximal oral vasodilator therapies, including numerous admissions for intravenous iloprost infusions, she lost several digits either by autoamputation or surgical amputation **(Figure 1)**. In 2011, a non-healing ulcer on the right big toe rapidly progressed to gangrene of the foot and a below knee amputation was performed **(Figure 2)**. A prior peripheral angiogram of the limbs revealed bilateral cut-off of the proximal ulnar arteries **(Figure 3a, b)** and cut-off of both dorsalis pedis arteries at the ankles **(Figure 3c, d)**. Histopathology specimens of the amputated limb showed the classical obliterative vasculopathy of small and medium-sized vessels, with no features of vasculitis or atherosclerosis **(Figure 4)**. Poor healing of the right stump wound necessitated an above knee amputation in 2013. In 2016, she developed refractory ischaemic skin ulcers of the left foot. A CT-angiogram confirmed left dorsalis pedis disease and a below knee amputation was performed. Now fully wheelchair bound and without most fingers, Natasha became increasingly dependent on assistance for everyday activities, including aspects of self-care.

As a result of the appearance of diffuse telangiectasias on her face and visibly poor dentition, she increasingly avoided

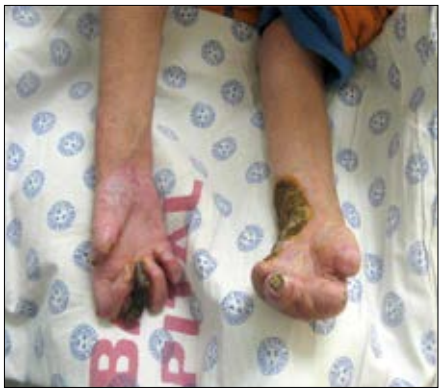

Figure 1. Image of hands of the patient showing flexion contractures of the fingers, gangrene and amputated digits.

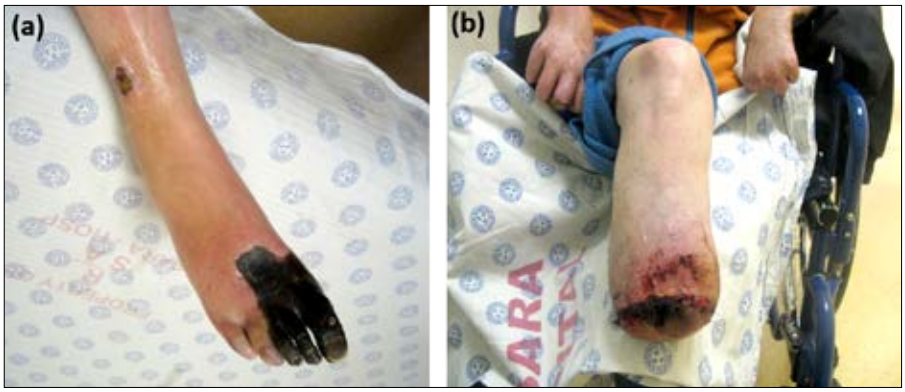

Figure 2. Gangrene of the right foot (a) and below knee amputation (b).

social contact **(Figure 5)**. She would camouflage her facial lesions with foundation base. Eating and speaking became more difficult as a result of severe oral sicca symptoms, dental crowding and limited mouth opening. In 2018, she underwent dental surgery which involved extraction of all teeth in conjunction with alveolectomies. After a prolonged period of healing, dentures were successfully fitted **(Figure 6)**. Apart from improving her ability to eat and chew food, Natasha noticeably regained her self-esteem.

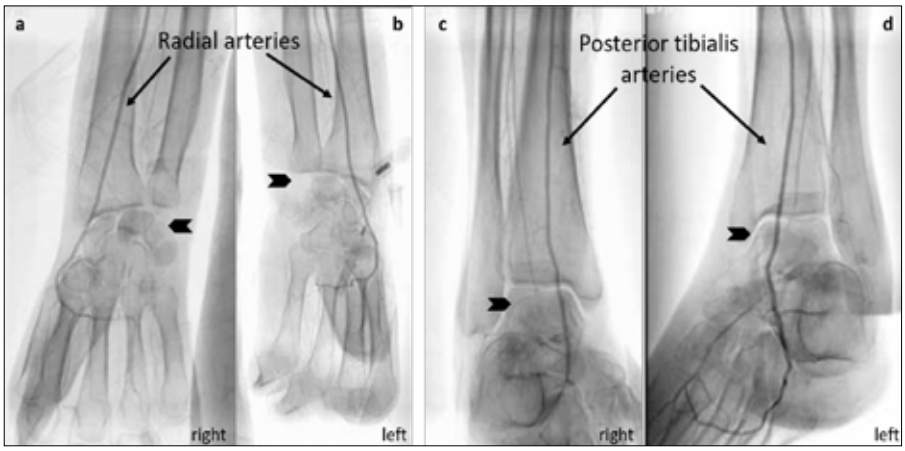

Figure 3. Peripheral angiogram showing bilateral absence of the ulnar arteries (proximal cut-off) (a, b) [wide arrowheads] and cut-off of both dorsalis pedis arteries at the ankles (c, d) [wide arrowheads].

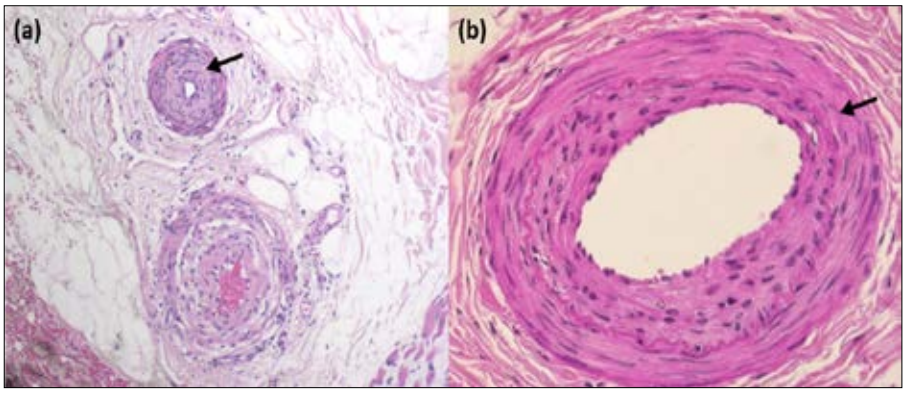

Figure 4. Histopathology (H&E stain) of small (a) and medium-sized vessels (b) showing intimal proliferation and obliterative vasculopathy (arrows).

For the rheumatologist

Natasha's case firstly presents a challenging scenario of refractory skin ulcers resulting in loss of multiple digits and her lower limbs. DUs are a common and disabling complication of SSc vasculopathy, affecting around half of patients during their disease course.[1] Patients with DUs experience significant pain, and high levels of hand and global disability.[2] Ulcers on the fingertips are typically ischaemic related to microvascular involvement in SSc. Recurrent trauma and increased skin tension over bony prominences can also result in ulcerations. Furthermore, subcutaneous calcinosis can predispose to inflammatory ulcer development. Digital ulcer related complications include infections, gangrene, and/or amputation.[3] Although microvascular disease is universally present in SSc, peripheral macrovascular (proximal larger vessel) involvement has been reported in several studies. In the upper limbs, ulnar arteries are preferentially targeted[4-6] and are associated with the development of DUs.[7] Macrovascular disease in the lower limbs is less well described in patients with SSc. However, an association between the severity of peripheral ischaemia [measured by the ankle brachial pressure index (ABPI)], and older age, smoking, lcSSc and positive ACA has been described.[8] It remains key for clinicians to assess peripheral pulses in every SSc patient presenting with digital ischaemia. Furthermore, the modified Allen's test is a simple bedside test to evaluate compromise of ulnar or radial flow to the hand.[9] The definitive exclusion of proximal large vessel disease by angiography or doppler ultrasonography is important in patients who manifest features of severe/refractory digital vasculopathy.[3] Clinicians must remain attentive to the possibility of other contributing elements to digital ischaemia such as traditional risks factors, embolic phenomena, thrombophilic states and vasculitis. Limited good data is available evaluating the effectiveness of vasodilator therapies and/or surgical revascularisation for proximal large vessel disease in SSc.

The second component of Natasha's clinical course deals with frequently overlooked aspects in SSc related to changes in appearance and dental/periodontal health. Her facial disfigurement affected her mouth function and self-confidence. Orofacial manifestations in SSc patients including stiffness of facial skin, retracted lips, microstomia, telangiectasias, dry mouth and periodontal disease have a profound effect on mouth function and quality of life.[10, 11] Microstomia is common and related to fibrosis in the perioral tissues resulting in difficulty with eating, speaking and dental caries.[12, 13] This can further be compounded by tongue fibrosis/rigidity, mandibular angle resorption and temporomandibular problems.[12,14] Hyposalivation from salivary gland fibrosis or secondary Sjogren's syndrome, together with oesophageal reflux, further promote declining periodontal disease.[12, 15] Interestingly, periodontal disease occurs in up to 95% of SSc patients, most commonly

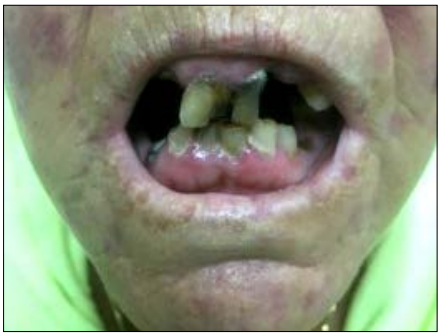

Figure 5. Face image showing telangiectasias, microstomia and poor dentition

due to collagen deposition resulting in widening of the periodontal ligament space.[16] Management options to maintain oral hygiene include:

- daily orofacial exercises
- use of adaptable small head toothbrushes or an electric toothbrush
- flossing
- use of saliva substitutes/stimulators and room humidifier
- smoking cessation
- frequent dental visits.[17]

With regards to cosmetically distressing skin manifestations, telangiectasias are more evident on white skin. The extent of body and face skin involvement, presence of upper-body telangiectasias and hand contractures, as well as younger age, have been shown to be associated with body image dissatisfaction and social discomfort in a Canadian study of 489 patients, consisting of dominantly white females with lcSSc.[18] Dyspigmentation such as the salt and pepper rash, and diffuse hyperpigmentation are more frequently associated with the diffuse form of SSc in patients of darker phenotypes. The role of ethnicity in relation to body image outcomes in SSc remains an unexplored area. Body image dissatisfaction may contribute to anxiety and social withdrawal. Clinicians need to be more aware of patients' body image distress by simply enquiring about their appearance concerns. Referral to appropriate healthcare providers or support groups should be offered when appropriate.

Natasha's rise above adversity

Natasha endured 23 years of debilitating pain and suffering. She lived a secluded life as a result of her multiple amputations and facial disfigurement. Replacing her teeth with dentures was enormously uplifting for her and she could smile back at the world again. She moved from Gauteng in 2021 and spent the last 3 years of her life enjoying the restorative warm climate of Limpopo. She loved her dogs and spent many hours on the computer or doing "Diamond Dotz" with her caring aunt. Despite her hand disability, Natasha produced amazing pencil drawings **(Figure 7)**. Shortly before her passing, she finished one of Praying Hands **(Figure 8)**. With her resilience and positive outlook, she defeated the negatives and emerged a champion.

The article was written posthumously.

Informed consent was obtained from the patient prior to her passing.

REFERENCES

Figure 7. Pencil drawing by the patient.

Figure 6. Image of the patient after dental procedure.

Figure 8. Patient's drawing of Praying Hands.

1. Khimdas S, Harding S, Bonner A, Zummer B, Baron M, Pope J. Associations with digital ulcers in a large cohort of systemic sclerosis: Results from the Canadian Scleroderma Research Group registry. Arthritis Care Res (Hoboken). 2010;63(1):142-9.
2. Mouthon L, Carpentier PH, Lok C, Clerson P, Gressin V, Hachulla E, et al. Ischemic Digital Ulcers Affect Hand Disability and Pain in Systemic Sclerosis. J Rheumatol. 2014;41(7):1317-23.
3. Hughes M, Allanore Y, Chung L, Pauling JD, Denton CP, Matucci-Cerinic M. Raynaud phenomenon and digital ulcers in systemic sclerosis. Nat Rev Rheumatol. 2020;16(4):208-21.
4. Taylor MH, McFadden JA, Bolster MB, Silver RM. Ulnar artery involvement in systemic sclerosis (scleroderma). J Rheumatol. [Research Support, Non-U.S. Gov't]. 2002 Jan;29(1):102-6.
5. Lescoat A, Yelnik CM, Coiffier G, Wargny M, Lamotte C, Cazalets C, et al. Ulnar Artery Occlusion and Severity Markers of Vasculopathy in Systemic Sclerosis: A Multicenter Cross-Sectional Study. Arthritis Rheumatol. 2019;71(6):983-90.
6. Emad Y, Al- Sherbeni H, Ragab Y, Abo-El-Youn I, El-Shaarawy N, Nassar DY, et al. Arterial vasculopathy in systemic sclerosis: Computerized tomography (CT) angiographic features of macrovascular and microvascular upper limbs arteries. Joint Bone Spine. 2014;81(5):433-7.
7. Frerix M, Stegbauer J, Dragun D, Kreuter A, Weiner SM. Ulnar artery occlusion is predictive of digital ulcers in SSc: a duplex sonography study. Rheumatology (Oxford). 2012 Apr;51(4):735-42.
8. Wig S, Wilkinson J, Moore T, Manning J, Chevance A, Vail A, et al. A longitudinal study of ankle brachial pressure indices in a cohort of patients with systemic sclerosis. Rheumatology (Oxford). 2014;53(11):2009-13.
9. Asif M, Sarkar PK. Three-Digit Allen's Test. The Annals of Thoracic Surgery. 2007;84(2):686-7.
10. Jung S, Martin T, Schmittbuhl M, Huck O. The spectrum of orofacial manifestations in systemic sclerosis: a challenging management. Oral Diseases. 2017;23(4):424-39.
11. Smirani R, Truchetet ME, Poursac N, Naveau A, Schaeverbeke T, Devillard R. Impact of systemic sclerosis oral manifestations on patients' health-related quality of life: A systematic review. Journal of Oral Pathology & Medicine. 2018;47(9):808-15.
12. Abubakr OA, Mostafa TFMM, Hamdy MA. Oral and Dental Health in Systemic Sclerosis: Is it a Window to Other Systemic Affections? Journal of Medicine in Scientific Research. 2024;7(2).
13. Poole JL, Brewer C, Rossie K, Good CC, Conte C, Steen V. Factors related to oral hygiene in persons with scleroderma. International Journal of Dental Hygiene. 2005;3(1):13-7.
14. Burchfield C, Vorrasi J. Maxillofacial Implications of Scleroderma and Systemic Sclerosis: A Case Report and Literature Review. Journal of Oral and Maxillofacial Surgery. 2019;77(6):1203-8.
15. Avouac J, Sordet C, Depinay C, Ardizonne M, Vacher-Lavenu MC, Sibilia J, et al. Systemic sclerosis–associated Sjögren's syndrome and relationship to the limited cutaneous subtype: Results of a prospective study of sicca syndrome in 133 consecutive patients. Arthritis Rheum. 2006;54(7):2243-9.
16. Iordache C, Antohe M-E, Chirieac R, Ancuța E, Țănculescu O, Ancuța C. Volumetric Cone Beam Computed Tomography for the Assessment of Oral Manifestations in Systemic Sclerosis: Data from an EUSTAR Cohort. J Clin Med. 2019;8(10):1620.
17. Ciurea A, Rednic NV, Soancă A, Micu IC, Stanomir A, Oneț D, et al. Current Perspectives on Periodontitis in Systemic Sclerosis: Associative Relationships, Pathogenic Links, and Best Practices. Diagnostics. 2023;13(5):841.
18. Fielding R, Jewett LR, Hudson M, Malcarne VL, Baron M, Thombs BD. Sociodemographic and Disease Correlates of Body Image Distress among Patients with Systemic Sclerosis. PLoS One. 2012;7(3):e33281.

Scleroderma Awareness Day at Bara

Beloved scleroerma patients enjoying the annual scleroderma awareness day

Report: "Hand in Hand" Patient Advocates Meeting

We are delighted to report on the remarkable success of the Hand in Hand Patient Advocates Meeting, which took place on 14 November 2024 at Groote Schuur Hospital, Cape Town. This landmark national event was the first of its kind in South Africa, bringing together patient support group leaders from across the country to strengthen existing networks and establish new ones, particularly in regions where support groups for Rheumatic and Musculoskeletal Diseases (RMDs) are lacking.

The meeting was with endorsed by the South African Rheumatism and Arthritis Association (SARAA), and organised by a steering committee composed of:

- Maranda van Dam (Axial Spondyloarthritis Association of South Africa (ASASA))
- Una van Rhyn (Andreas Gift Foundation (AGF))
- Catherine McCormack (Autoimmune Alliance of South Africa)
- Bridget Hodkinson (Rheumatology, University of Cape Town (UCT))

The meeting aimed to:

- **Build Capacity:** Empower individuals affected by RMDs with the knowledge and tools to set up and run effective support groups and advocate for better healthcare and services.
- **Foster Collaboration:** Provide opportunities for participants to connect with fellow advocates, healthcare professionals and researchers, promoting the sharing of insights and best practices.
- **Drive Awareness and Action:** Strengthen our collective voice to influence positive change, both locally and globally, in areas such as access to care, support services, and research funding.

Attendance and Representation

The meeting was attended by 40 delegates from across South Africa, representing a wide range of RMDs, including gout, rheumatoid arthritis, systemic sclerosis, lupus, psoriatic arthritis, and fibromyalgia. Thanks to sponsorship, accommodation and travel was offered to all attendees.

Programme Highlights

The event kicked off with inspiring talks from representatives of established patient support groups, including AGF, ASASA, the Arthritis Foundation of South Africa, and the South African Psoriasis Association. Speakers shared the "WHY" behind their invaluable work, offering practical advice on starting and sustaining support groups, and discussing common challenges and pitfalls.

A panel discussion allowed participants to delve into the realities of patient advocacy, with a particular focus on the role of patients in driving activism and influencing policy. This was followed by a virtual presentation by Prof. Susanne Pettersson from Stockholm, Sweden, who discussed the critical role of patients in shaping research. We were honored by Prof Ingemar Pettersen's in-person visit. Prof Peterssen highlighted the progress made by the European League Against Rheumatism (EULAR), through OMERACT (Outcome Measures in Rheumatology) to ensure. that the patient's voice is central to rheumatology research and recommendations.

The UCT Rheumatology team provided updates on the latest clinical guidelines for RMD management, and it was agreed that these guidelines should be simplified into a patient-friendly format for wider distribution to patients and caregivers.

Delegates came from all over South Africa including the Western and Eastern Cape, Gauteng and Limpopo

Maranda van Dam (ASASA), Una van Rhyn (AGF), Dr Angela Matsepe (Rheum fellow UCT), Dr Jaques le Roux (Rheum fellow UCT), Veronica Mitchell (SAPA)

Special Contributions

- Ms. Siphe Ntsabo, a Lupus Warrior and local chef, provided lunch, showcasing her catering business in the Western Cape.
- Una van Rhyn shared her experiences from running the Andreas Gift Foundation since 2017, offering valuable insights on patient education and support.
- A practical session on website design and digital engagement, led by Lana Wessels, equipped delegates with the skills to enhance their groups' online presence.
- A panel on international collaboration and fundraising, initiated by Maranda van Dam of ASASA, provided essential pathways for expanding support networks and securing financial resources.

Reflection and Outcomes

Over dinner, participants reflected on the day's discussions, feeling both empowered and inspired to raise awareness about RMDs, challenge misconceptions, and drive meaningful change. Many delegates expressed a deep sense of renewed purpose, particularly in strengthening support groups and advocating for improved patient outcomes in South Africa.

This meeting was seen as an important first step towards creating a stronger, more connected network of patient advocates. We are confident that it will serve as a foundation for future collaboration, with an increased focus on patient advocacy, activism, and research.

Acknowledgements

We are most grateful for the generous support of our sponsors from the pharmaceutical industry (in alphabetical order): **AbbVie, Adcock Ingram Healthcare, Aspen Pharmacare, Cipla, Janssen Pharmaceutica, Roche, Sandoz.** Without their educational grants, this meeting would not have been feasible. Their commitment to supporting patient education and advocacy is greatly appreciated.

We also thank Mrs. Amelia Lawrence for her exceptional administrative support, ensuring the smooth running of the event.

Chef Siphe Ntsabo provided lunch.

Looking Ahead

We are excited about the potential of this newly established network and look forward to holding this event annually. We anticipate that as we continue to grow and strengthen our support groups, the RMD patient advocacy network in South Africa will become a powerful force for change.

Bridget Hodkinson and the Hand in Hand Steering Committee.

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References:
1. As per the schedule of medicines from the National Department of Health, dated 1 January 2024
2. Apsangikar P, Chaudhry S, Naik M, Deoghare S and Joseph J. Comparative Study for Efficacy and Safety of Biosimilar Infliximab in Patients with Active Rheumatoid Arthritis on a stable Dose of Methotrexate. J Arthritis Rheumatol Res 1(1): 101 Citation 2018
3. Lambert J, Wyand M, Lassen C, Shneyer L. Bioavailability, safety and immunogenicity of biosimilar infliximab (BOW015) compared to reference infliximab. International Journal of Clinical Pharmacology and Therapeutics, Vol. 54 – No. 4/2016 (315-322)

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References: 1. PROLIA® South Africa Professional Information, 12 July 2023. **2.** Coleman R, Hadji P, Body JJ, Santini D, Chow E, Terpos E, et al. Bone health in cancer: ESMO Practice Guidelines. *Annals of Oncology*. 2020;31(12):1650-1663. **3.** Bone HG, Wagman RB, Brandi ML, Brown JP, Chapurlat R, Cummings SR, et al. 10 years of denosumab treatment in postmenopausal women with osteoporosis: results from the phase 3 randomised FREEDOM trial and open-label extension. *Lancet Diabetes Endocrinol.* 2017;5:513-523. **4.** Orwoll E, Teglbjaerg CS, Langdahl BL, Chapurlat R, Czerwinski E, Kendler DL, et al. A Randomized, Placebo-Controlled Study of the Effects of Denosumab for the Treatment of Men with Low Bone Mineral Density. *J Clin Endocrinol Metab.* 2012;97:3161-3169. **5.** Saag KG, Wagman RB, Geusens P, Apache JD, Messina OD, Emkey R, et al. Denosumab versus risedronate in glucocorticoid-induced osteoporosis: a multicentre, randomised, double-blind, active-controlled, double-dummy, non-inferiority study. *Lancet Diabetes Endocrinol.* 2018;6:445–54. http://dx.doi.org/10.1016/. **6.** Ellis GK, Bone HG, Chlebowski R Paul D, Spadafora S, Smith J, et al. Randomized trial of denosumab in patients receiving adjuvant aromatase inhibitors for nonmetastatic breast cancer. *J Clin Oncol.* 2008;26:4875-4882. **7.** Smith MR, Egerdie B, Hernández Toriz N, Feldman R, Tammela TLJ, Saad F, et al, for the Denosumab HALT Prostate Cancer Study Group. Denosumab in men receiving androgen-deprivation therapy for prostate cancer. *N Engl J Med.* 2009;361:745-755.

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