

#### Aim

Each week a brief report will be circulated. The aim is to share information and learning points from clinical cases with COVID-19. Please note these reports are intended for health professionals only and should not be distributed on social media.

Vasculitis COVID-19 cases			
Reported	Died		
59	16		

## How to submit cases

Online case submission is now available via the new COVID-19 module of the UKIVAS web app. Many thanks to Joe Barrett and David Gray from Oxford for working tirelessly to get this live. If your site is not yet recruiting for UKIVAS, and you would like to set this up, please contact the team at <u>ukivas@ndorms.ox.ac.uk</u>.

A paper version of the reporting form is available so sites not yet recruiting for UKIVAS can also submit cases.

Please submit paper cases, comments or questions to the UKIVAS COVID-19 group at: <u>gg-uhb.vasculitis-covid@nhs.net</u>.

### Cases

We are grateful for the update of the following case.

Patient 42 - update	
Age / sex	Female, age unknown
Vasculitis diagnosis	GPA
Disease activity	Severe disease activity
Other medical history	CKD, hypothyroidism
Current treatment	Treatment naïve
ACEI / ARB / NSAID	Nil
Presentation	New GPA diagnosis, with symptoms since September 2019. Admitted with mild COVID illness (fever, headache, myalgia, breathlessness). AAV subsequently diagnosed (erosive ENT disease, retro-orbital lesion, cavitating lung lesions, crescentic GN on biopsy).
Management	Hospitalised, not requiring supplemental oxygen
Update	By the time she had CT chest, MRI orbits, ophth review, renal referral and biopsy etc, her COVID fever had resolved, she had a negative PCR swab, the treating team were able to confirm IgM and IgG to COVID on a lateral flow immunoassay, so felt comfortable starting treatment last week. Currently doing OK as an out-patient. ***Please see discussion section regarding use of serology***





For three patients we do not have information regarding symptoms. Dyspnoea was the most common presenting symptom in 38 of 56 patients (68%). Fever and cough were the next most common symptoms in 33 patients (59%) and 32 patients (57%) respectively.

\* Note one individual who experienced haemoptysis and epistaxis was thought to be experiencing a possible flare of vasculitis



# Clinical characteristics of vasculitis patients with COVID-19

Clinical characteristics			
Critical Outcome*	No	Yes	Total
	n = 36	n = 23	n = 59
Demographics			
Age, Mean (SD)	64.3 (17.4)	67.0 (12.7)	65.3 (15.7)
Female, n (%)	20 (55.6)	10 (43.5)	30 (50.8)
Ethnicity, n (%)			
Asian	4 (11.1)	0 (0)	4 (6.8)
Black	1 (2.8)	0 (0)	1 (1.7)
White	23 (63.9)	15 (65.2)	38 (64.4)
Not stated	8 (22.2)	8 (34.8)	16 (27.1)
Smoking status, n (%)			
current	2 (5.6)	1 (4.3)	3 (5.1)
former	5 (13.9)	4 (17.4)	9 (15.3)
never	15 (41.7)	5 (21.7)	20 (33.9)
unknown	14 (38.9)	13 (56.5)	27 (45.8)
Comorbidities, n (%)			
Diabetes	8 (22.2)	4 (17.4)	12 (20.3)
Hypertension	13 (36.1)	11 (47.8)	24 (40.7)
Renal disease	18 (50.0)	10 (43.5)	28 (47.5)
CV disease	7 (19.4)	7 (30.4)	14 (23.7)
Respiratory disease	5 (13.9)	7 (30.4)	12 (20.3)
Vasculitis diagnosis, n (%)			
GPA (or PR3 AAV)	9 (25.0)	12 (52.2)	21 (35.6)
MPA (or MPO AAV)	16 (44.4)	5 (21.7)	21 (35.6)
Other	11 (30.6)	6 (26.1)	17 (28.8)
Disease activity, n (%)			
active	17 (47.2)	10 (43.5)	27 (45.8)
remission	19 (52.8)	13 (56.5)	32 (54.2)

\* Critical outcome refers to death, need for invasive or non-invasive ventilation or use of high flow oxygen device



Medication			
Critical outcome*	No	Yes	Total
	n = 36	n = 23	n = 59
Current immunosuppressive therapy, n (%)			
Azathioprine	7 (19.4)	6 (26.1)	13 (22.0)
Corticosteroid (any)	20 (55.6)	19 (82.6)	39 (66.1)
Prednisolone 1-5 mg daily **	0 (0)	2 (8.7)	2 (3.5)
Prednisolone >5 mg daily**	20 (58.8)	17 (73.9)	37 (64.9)
(Missing corticosteroid dose)	2 (5.6)	0 (0)	2 (3.4)
Cyclophosphamide	3 (8.3)	3 (13.0)	6 (10.2)
Hydroxychloroquine	2 (5.6)	2 (8.7)	4 (6.8)
IVIG	1 (2.8)	0 (0)	1 (1.7)
Mycophenolate	6 (16.7)	5 (21.7)	11 (18.6)
Rituximab	10 (27.8)	8 (34.8)	18 (30.5)
Other medications, n (%)			
ACEI or ARB	11 (30.6)	8 (34.8)	19 (32.2)
NSAID	0 (0)	2 (8.7)	2 (3.4)
(Missing – ACEI / ARB / NSAID)	3 (8.3)	1 (4.3)	4 (6.8)

\* Critical outcome refers to death, need for invasive or non-invasive ventilation or use of high flow oxygen device

\*\* Or other steroid in prednisolone equivalents

#### Discussion

For case 42, while serology was useful to the treating team, it is not possible to make any recommendation for it's application. The availability of serological testing is not widespread and therefore is by no means necessary to support the view that COVID-19 has resolved for an individual.

Patients should be evaluated on an individual basis regarding the timing of immunosuppression in the setting of COVID-19. Treatment of active vasculitis may be necessary despite active infection.