

18.6.2 - Non-ST-Elevation Myocardial Infarction (NSTEMI)

The effect of the COVID-19 pandemic on time to angiography and outcomes in patients presenting with non-ST elevation myocardial infarction

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Background: Covid-19 pandemic has had a profound impact on healthcare service delivery. Acute cardiovascular care however remains a priority despite the pandemic. Patients presenting with non-ST elevation MI (NSTEMI) have been poorly characterised during the pandemic.

Methods: We conducted a retrospective study of patients diagnosed with NSTEMI during the peak of the pandemic between April-May 2020 at our tertiary centre in the UK. Data was collected from electronic patient clinical records including time from admission to angiography, length of stay, mortality, prescription of secondary prevention pharmacotherapy and referral to cardiac rehabilitation. We compared this data to the same time period in 2019.

Results: As can be seen from Table 1, in 2020, the mean age, median time to angiography and length of stay were all significantly lower than the control period of 2019. Prescription of secondary prevention medication (Aspirin, P2Y12 inhibitor, Beta-blocker, Statin and ACEi/ARB) and referral to cardiac rehabilitation also improved in 2020, however neither was statistically significant.

During the 2020 period, 1 patient died due to late presentation NSTEMI and multi-organ failure. There were 3 deaths in 2019: complications following coronary bypass surgery, upper GI bleed and a subarachnoid haemorrhage.

Conclusion: Our results show that the mean age of the patients presenting with NSTEMI during the peak of Covid-19 pandemic was younger suggesting that elderly patients failed to present. Compared to 2019, there was significant improvement in patient treatment times with a significantly shorter stay in hospital, probably as a result of the reduction in elective activity allowing un-restrained access to the catheter labs. We also saw improvement in prescription for secondary prevention and referral to cardiac rehabilitation services during this time suggesting that there may have been improved focus on these aspects of care again.

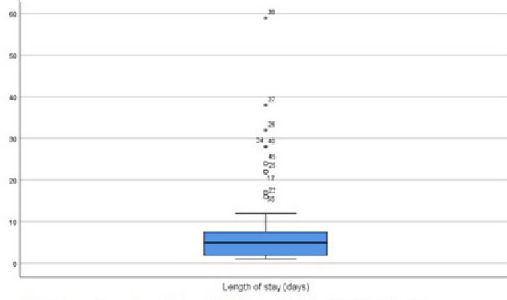
Table 1

	2019	2020	p-value
Age (years)	71.2 ± 12.2	65.0 ± 12.1	p < 0.01
Number of NSTEMI patients	56	59	p = NS
Number of NSTEMI patients undergoing angiography	50	53	p = NS
Median time to angiography (hours)	68.6	14	p < 0.01
Median length of stay (days)	5 (IQR 2:8)	2 (IQR 1:4)	p < 0.01
Referral to cardiac rehabilitation	77.4%	84.5%	p = NS
Prescription of secondary prevention medication	69.8%	72.4%	p = NS

Table 1- Comparison of NSTEMI patients in 2019 and 2020

Abstract Figure. Box and whisker plot for hospital stay

Median time for Hospital stay 2019 (5, IQR 2-8)



Median time for Hospital stay 2020 (2, IQR 1-4)

