

## Good Practices and Adverse drug reactions

Maxime Coles MD

- A- There is little research about post-operative complications and re-admission rates in Robotic Surgery and not too much is known about comparison between manual Total knee Replacements. And Robotic Total Knee replacements. A recent article was published in the Journal of the American Academy of Orthopedic Surgeons in July 2024 comparing complications after three months (90 days), the rate of re-admission and their visits to the Emergency department. The study review cases done between January 2016 and May 2023.
- B- 15,999 cases from 282 surgeons were studied based on age and sex, body mass index, hospital setting, surgeon experience, primary payer and anesthesia type. They reviewed all 90-days post op visits, especially the re-admissions within 23 hours for observation and the re-visit in the Emergency rooms. The complications were classified following different schema between cohorts of 7,146 patients.
- C- 2.4% of Robotic Total Knees were re-admitted in 90 days versus 2.6% of the Manual Total Knees... while Robotic TKA had fewer hospital re-visits for joint stiffness (17) and chronic pain (1) compared to Manual TKA (42) and(8) or for hematoma in Manual TKA (7) and none in the Robotic TKA.
- D- In conclusion, the Robotic TKA was associated with fewer re-visits and re-admissions within 23 hours of post-op observation but there was no difference in all-cause re-admission in both cohorts-groups.
- E- New mRNA COVID vaccines (Moderna and Pfizer) have been approved by the US Food and Drug Administration (FDA) for patients aged 6 months and older. These vaccines target Omicron's KP.2 strain and include also people who have never been vaccinated as well as people who have been infected with COVID. It was decided

that patients can wait for 3 months after a COVID infection to be vaccinated. Most people has some degree of COVID protection from previous contacts, infections or vaccination, but still may become infected. It would be logical to go with the best way to stay well and to get a dose of the updated vaccine if you are dealing with high risk people or if you belong yourself to a high risk group.

F- 2/3 of the hospitalizations are among the 65 and older population and among the less than 5 months old, ut since these babies are too young to be vaccinated, their mother can benefit from the vaccination to protect them. There are still some racial and ethnic disparities in COVID-related hospitalizations especially in American Indians, Alaskan Native and Black populations. Immuno-compromised patient and others with chronic medical conditions , others living in long-term care facilities are still at risk but additional mRNA is not recommended for the one older than 65.

G- More than 75,000 of a million hospitalized persons have died and it was found in 2023, that COVID vaccines have help protecting from a more severe disease as well as hospitalization and death. The disease is now endemic and will survive among us. The virus has changed a lot and antibodies have built in us a defense that we can always boost in taking another dose of the new vaccine. Especially while we are entering respiratory virus season with possible COVID, Influenza Flu, Respiratory Syncytial Virus. Be careful and think about vaccination...

H- A new study has shown long-term prognosis in patients with Myocarditis due to COVID-19 mRNA vaccination, SARS-CoV-2 Infection and other etiologies was published in 2024 by Laura Semenzato et al in the JAMA....About the long-term prognosis of Myocarditis after COVID-19 mRNA vaccination versus myocarditis from other origins: 4635 patients were admitted in France following COVID-19 vaccination and 558 individuals with post-vaccine myocarditis have presented less severe cardiovascular events than those with myocarditis from other origin. Affected healthy young men have required medical management up to several months following hospital discharge. In fact, the study showed that patients with post-COVID-19 mRNA vaccination myocarditis show a lower frequency of

cardiovascular complications than those with conventional myocarditis a year and half after.

Maxime Coles MD

Boca Raton FL Sept 2024