

Felipe Nasser MD, PhD

Interventional  
Radiology



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SOCIEDADE BENEFICENTE ISRAELITA BRASILEIRA



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- Nothing to disclose



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# COVID-19 in Brazil

First case: Feb 26, 2020

First death: Mar 12, 2020

March 24 → Social isolation in San Paulo (largest city in Brazil and COVID-19 epicenter) – isolation rates up to 60%.

Closing of pubs, bars, restaurants, schools, parks, shopping malls

May 7, 2020 – government makes wearing face masks mandatory in public places

Government provides financial aid for low-income families (approx. U\$ 110)

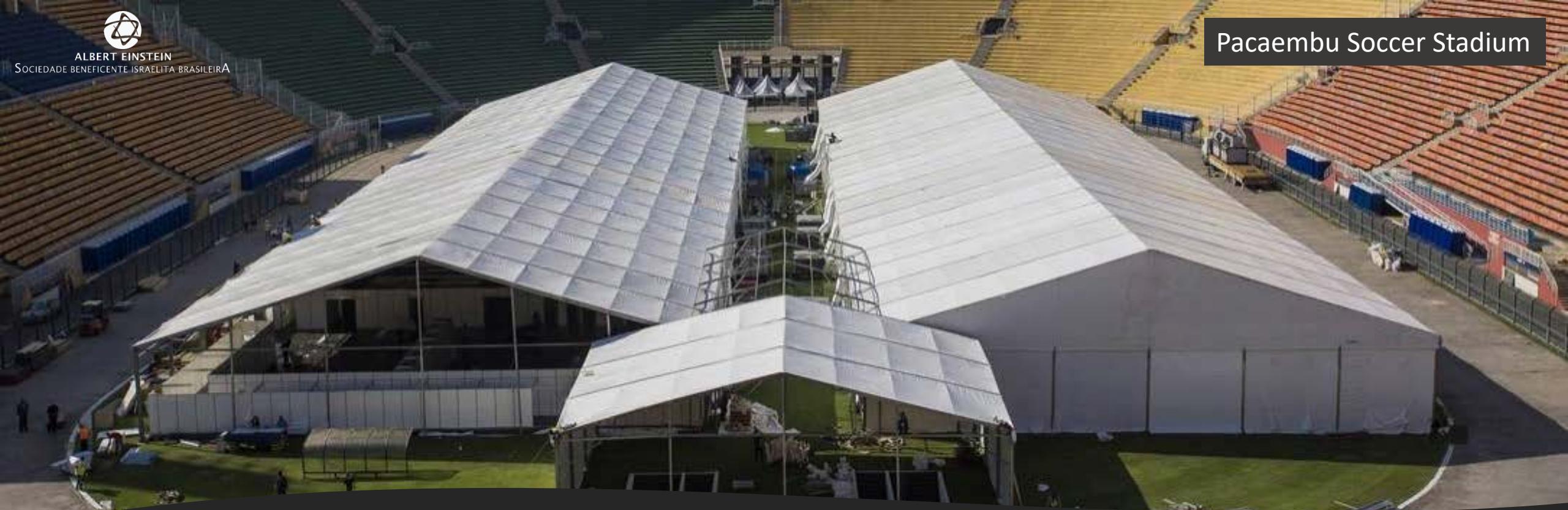




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Pacaembu Soccer Stadium



# Covid-19 in Brazil

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94 field hospitals in the country, with 9914 hospital beds

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Today: 4.5 million confirmed cases; over 138,000 deaths

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By September 26, schools are not allowed to reopen

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Unemployment rate 13.6% (increase of 26.7% during the pandemic)

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87% drop in new cancer diagnoses

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# COVID-19 positive patients

- Positive patients are led into the hospital through a separate entrance and when admitted, they stay in isolation ward or ICU
- In the IR department, every surgical equipment and interventional products are now kept outside the IR suite and only brought in when the IR specifically asks for them.
- The procedures were preferentially performed under general anesthesia to reduce aerosol dissemination



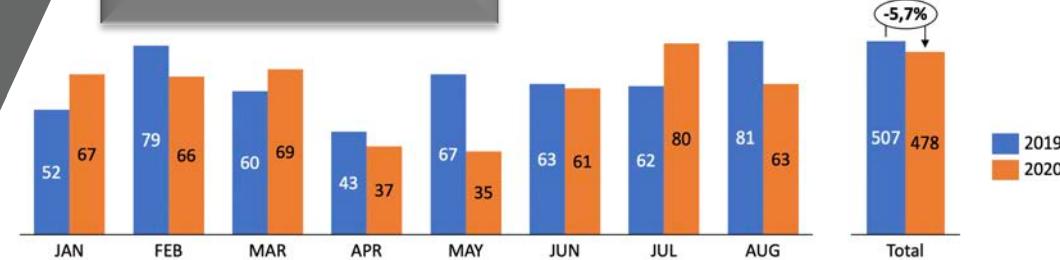
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# Changes in my department

- Drop of oncologic procedures number in IR (5.7% 2019-2020)
- All professionals must wear N95 masks
- Adaptations in surgical apparel – impermeable surgical gowns over the lead apron, N95 masks, disposable face shield.
- We reduced the operating room team members (only 1 fellow and 1 staff per procedure)

Patient volume

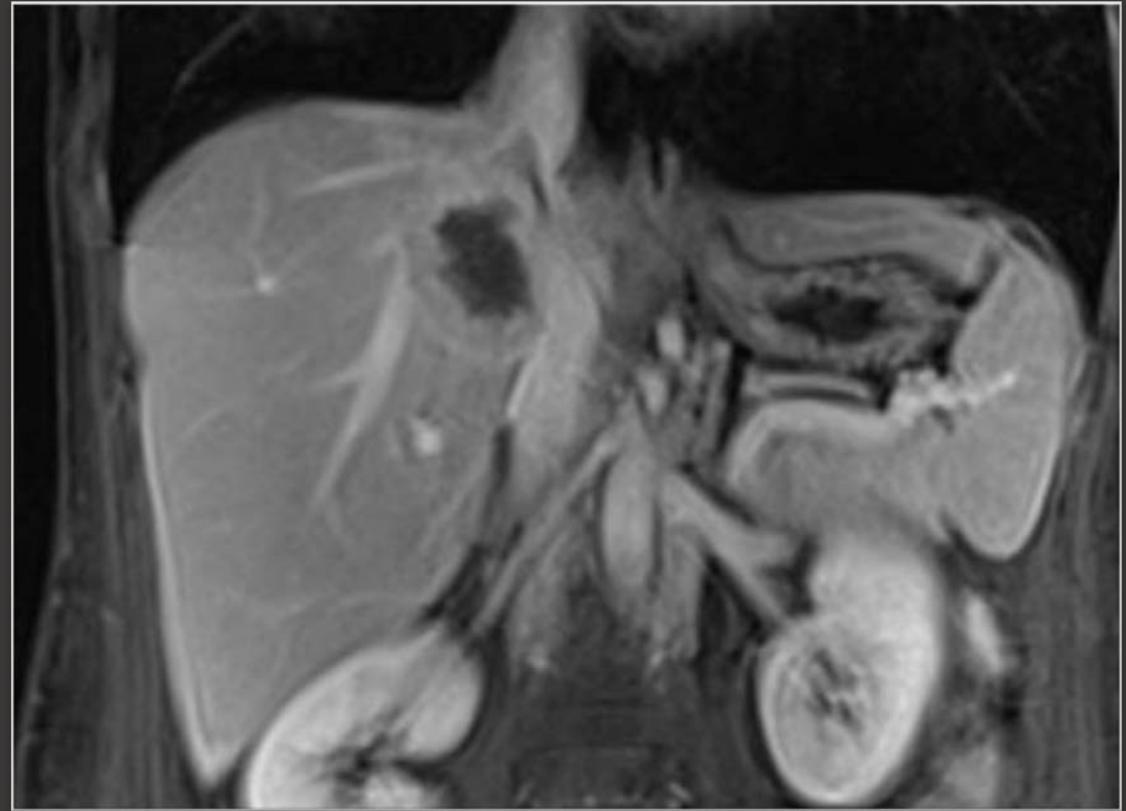
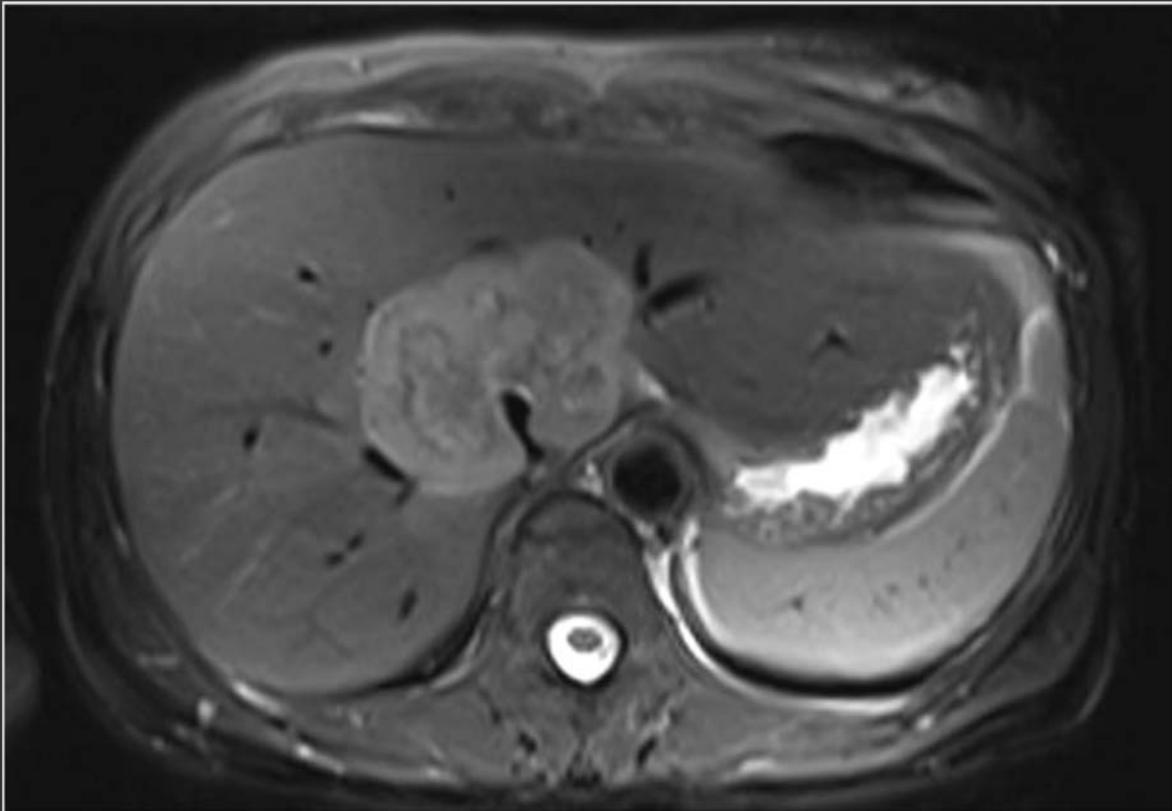


## Changes in my department

- Every procedure is performed in negative pressure rooms implanted during the pandemic
- All patients (symptomatic or not) are being tested for COVID-19 acute infection (PCR) before admission day
- Specialty societies created protocols to guide which treatments should be postponed during the pandemic

# Exciting case

GDS, 35-year-old female  
Unresectable cholangiocarcinoma



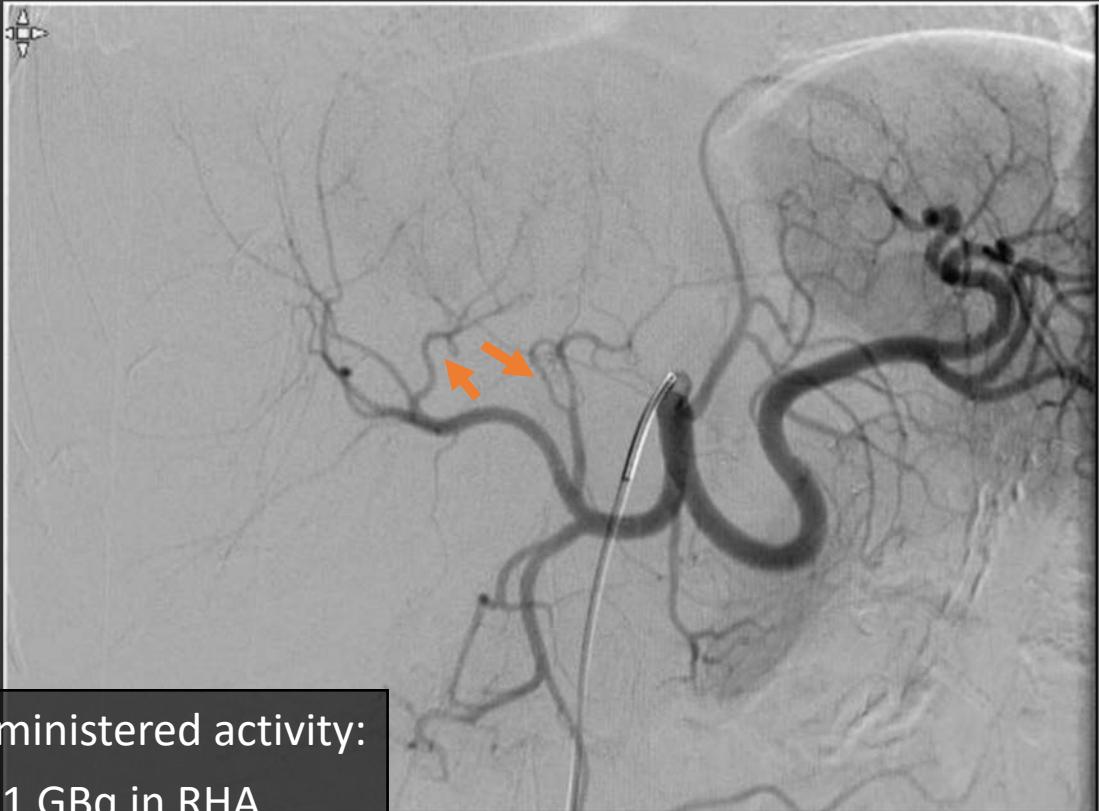
MRI at admission

Curative selective Y-90 radioembolization for  
cholangiocarcinoma

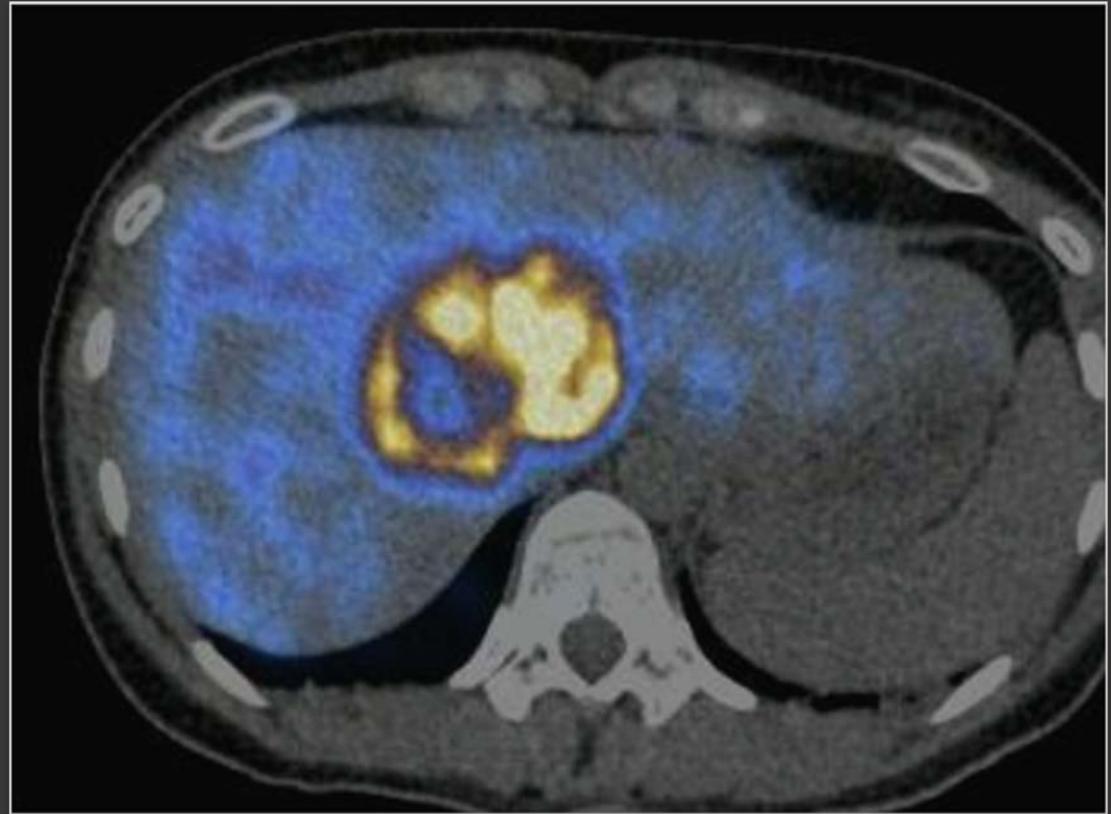


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Selective  
Y-90 injection  
(cone-beam CT)



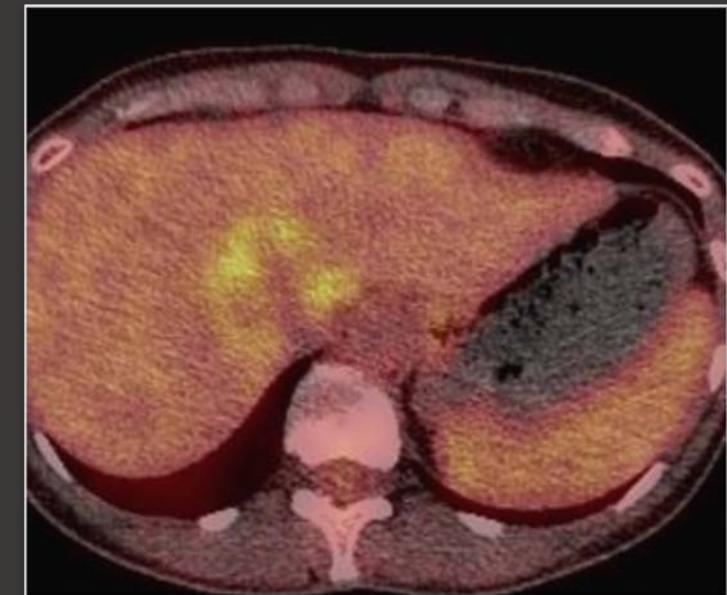
PET-scan 4h after  
Y-90 injection



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# Post SIRT CT and PET scan



Remaining liver



Tumor burden  
Venous compression  
FDG uptake (SUV 10.5 → 4.4)



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Post liver resection (segment IVa, IVb, V, VIII)



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THANK YOU