WHO Non-Governmental Organisations (NGOs) meeting facing COVID-19
27th March 2020

ISRRT response – appropriate and safe use of radiation – with control of infection issues considered

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Appropriate and safe use of radiation – key issues

• Radiographers and RTs are first line staff
• Will involve all imaging modalities and in particular X-ray and CT with possibly US chest for quick review of lungs. All involving radiographers and support staff including Nuclear Medicine and MRI and Therapy
• Standard radiation protection rules will apply for imaging procedures
• Temporary imaging rooms - consideration of physical barrier protection – need for mobile lead screens
• Control of infection is the major consideration
Appropriate and safe use of radiation – key issues

Society of Radiographers resources:
• https://www.sor.org/practice/covid-19coronavirus-information-and-resources
• https://www.sor.org/news/covid-19-new-e-learning-resources

Free learning resources from Heath Education England
• https://www.e-lfh.org.uk/programmes/coronavirus/
Appropriate and safe use of radiation – key issues

- Increasing use of mobile radiography as part of the diagnostic assessment for patients with respiratory symptoms and/or confirmed COVID-19
- Appropriate access to and training in the use of PPE for radiographers and equipment decontamination
- Radiographer first line image interpretation of CXRs and lungs on CT (chest and lung bases on abdominal imaging) to triage for an immediate clinical report, institute appropriate equipment cleaning and patient/staff PPE

SCoR UK resources

Appropriate and safe use of radiation – key issues

- Precautions against radiographers getting infected and/or spread the virus has to be top priority
- Separating if possible infected from non-infected
- Use of a mobile X-ray for infected patients in a temporary room – applying control area distance and direction of the beam
- Separate CT scanner if possible for infected patients
Appropriate and safe use of radiation – key issues

- Clear rooms of all non essential accessories and equipment and no gonad shielding
- CT and X-ray rooms – space out infected patients for 15 minutes to allow the air to be cleared
- Patient should wear a mask
- Need to form a joint WHO Task working group with ISRRT and other organisations to agree a strategy for air droplet precautions for all imaging procedures
**Appropriate and safe use of radiation – key issues**

**ISRRT – COVID-19 Medical Imaging Check list – as 3.4.2020**

<table>
<thead>
<tr>
<th>Control of COVID-19 Check List</th>
<th>Radiographer/RT</th>
<th>Patient</th>
<th>Equipment</th>
<th>Imaging Room or Mobile Imaging Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation</td>
<td>Will imaging change management and/or could be delayed? Is mobile imaging (XR, US, CT or Gamma camera) an option  Staff backup in case of AE-calls. Staff risk evaluation (pregnancy, immune, mental health concerns etc) Don PEE with all appropriate steps</td>
<td>Is it needed now or could this be delayed? Is mobile imaging possible? PPE during transfer to department when cannot be done mobile</td>
<td>Remove unnecessary equip from imaging room Could the examination be performed as a mobile?? Cover equipment that cannot be moved with suitable plastic</td>
<td>Remove unnecessary equip from imaging room Mobile??</td>
</tr>
<tr>
<td>During</td>
<td>Appropriate PPE Employ “clean technologist/dirty technologist” scenario Ensure single patient attendance to the Imaging department wherever possible to enable further imaging of this is required.</td>
<td>PPE, comfort, reassurance</td>
<td>Infection control and barrier precautions</td>
<td>Control access to imaging room or patient area during mobile radiography</td>
</tr>
<tr>
<td>Post procedure</td>
<td>Review of imaging by radiographer for suspicious features and organise additional imaging if required Doffing PPE equipment with all appropriate steps</td>
<td>PPE during transfer, rapid results to guide management</td>
<td>Appropriate decontamination including air exchange</td>
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</tr>
</tbody>
</table>

PPPE = Personal Protective Equipment, US = Ultrasound