

Good Clinical Practice: The Technologist Role in Daily Practice

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This presentation will provide an overview of the technologist's role in achieving and maintaining good clinical practice (GCP) in daily clinical nuclear medicine. How to perform GCP procedures in daily work will be described. Common mistakes and pitfalls that can lead to poor practice in daily work will be identified in distinct stages: patient preparation, radiopharmaceutical dispensing, patient injection, patient scanning, equipment quality control, image processing.

Good clinical practice is a term used to describe the idealised system of work that we use in our daily to ensure best practice. It is also used within the research and clinical trial setting (ICH-GCP) [1]. Technologists are key in ensuring that GCP is followed in their centre. Within the context of a multi-disciplinary team technologists must embrace the principles of GCP as the basis for their daily practice.

Achieving and maintaining GCP in daily practice requires compliance with a national regulatory framework. EU directive 97/43/EURATOM on health protection against the dangers of ionising radiation in relation to medical exposure has required individual member states to introduce legislation covering the use of radioactive substances in medicine [2]. The aforementioned directive itself reflects recommendations of the International Commission on Radiological Protection (ICRP). In the UK, EU directives have led to, among other regulations, strict regulations on medical exposures and the use of radioactive substances [3,4]. The latter established the Administration of Radioactive Substances Advisory Committee (ARSAC) which produces guidance notes on administering radioactive medicinal products for diagnosis, treatment and research purposes including information on best practice such as patient preparation and recommended dosages [5].

There are numerous other resources that the technologist can utilise in order to ensure GCP. These include guidelines from ICRP, equipment guidelines from manufacturers and NEMA, national and international nuclear medicine body guidelines such as the EANM [6,7]. Alongside reference to such national or international-based guidance, agreed standard operating procedures (local rules, protocols and procedures) should be implemented and adhered to in order to ensure GCP. However, national interpretation of guidelines may mean that what is considered GCP may vary across national boundaries. In order to harmonise nuclear medicine GCP across countries, adherence to international procedural and clinical guidelines is highly recommended.

Technologists can also ensure GCP is achieved and maintained by partaking in departmental accreditation through UEMS/EBNM, undertaking clinical audits (examinations of records to check their accuracy) and clinical governance (improvement of quality of service) [8]. There is also a need for technologists to constantly update their daily practice in order to reflect continual technological advancement and the adoption of new techniques previously not considered GCP.

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References

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