

Integrating Genomics in the era of Precision Medicine in Oncology – its Ethical, Legal and Social Implications (ELSI) in Malaysian Context

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ABSTRACT

Introduction: Precision Medicine (PM) is an emerging approach to healthcare delivery that takes into account individual variability in genes, environment and lifestyle. Scientists are now able to identify various germline and somatic mutations via molecular testing, leading to new drug discoveries, achieving promising outcome in cancer treatment. **Methods:** In this study systematic review of literatures available was done. **Results:** Pharmacogenomics which is the study of how genes affect one's response to drugs, allows better driven therapeutic decisions by its enhanced risk stratifying capability of the therapeutics therefore improve cancer survival. However, individuals who undergo pharmacogenomic testing maybe vulnerable to genetic discrimination. There is no law enforcement in Malaysia that protect them from being discriminated by insurers and employers. The informed consent in relation to pharmacogenomic testing is also comparatively more complex and lengthier. The public with limited genetic literacy about the implications of genomic testing maybe vulnerable for exploitation into research. The lack of standardisation in dealing with disclosure of the genetic information is another concern. Oncologists and onco-surgeons are not routinely trained to deliver genetic counselling There should be shared responsibilities in order to cope with the rising patient loads. Additionally, the population-wide access to genomic testing and therapeutics is also not presently attainable. The access to PM may also be cost-prohibitive if the patients' genotypes indicate expensive therapeutics that fall outside the standard of care. In long run, this therapeutic system would potentially exacerbate the existing health inequalities. **Conclusion:** PM results in earlier diagnosis and better prognostication of disease. However, the various ELSIs need to be addressed. Multi-stakeholders need to be prioritized in order to leverage resources and expertise in this.

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Fatal Intracranial Complications of Otitis Media - A case report

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ABSTRACT

Introduction: Chronic otitis media is a relatively common disease. Nowadays it is commonly believed that potentially fatal intracranial complications are rare with the advent of antibiotics and better healthcare. In this case report, we present the case of a young gentleman who had undiagnosed chronic otitis media complicated with fatal intracranial complications. **Case Report:** A 23 years old gentleman presented with 6 days history of fever with right sided otalgia and facial paralysis. On the day of admission he also developed weakness of the left lower limb. Further history revealed that he had recurrent episode of otorrhoea and otalgia for many years without prior consultation with otolaryngologist. Examination revealed spike of temperature with right sided facial nerve palsy House Brickman grade V and effusion with retracted tympanic membrane on the right ear with granulation tissue. Neurological examination showed reduce power on the left lower limb. His white cell count raised to 30 and increased C reactive protein (CRP) to 125. Contrast Enhanced Computed Tomography (CECT) was done, showing subdural empyema with associated mass effect, midline shift, generalized edema, right uncal herniation, complicated with dural venous sinus thrombosis and mastoiditis. He was started on intravenous ceftriaxone and underwent examination under microscope, craniotomy and evacuation of subdural empyema. Pus culture and sensitivity (C&S) grew bacteroides stercoris. Repeated CT scan post-operative showed unchanged subdural collection at right paramedian and right tentorium cerebelli regions with associated generalized edema, mass effect and suspicious uncal herniation. His condition deteriorated and later underwent decompressive craniectomy. Unfortunately, his clinical conditions continue to deteriorate further till he finally succumbed to his illness. **Conclusion:** Chronic otitis media relatively is a common disease. Serious complications are rare. Otitis media with intracranial complications potentially carries higher risk of morbidity and mortality. Teamwork approach including neurologist, ENT and Neurosurgeon is important in managing such a case.