Utilization of Molecular Testing in Clinical Practice

Phan, R.T.
Regional Molecular Pathology & Cytogenetics Laboratory
The Permanente Medical Group, Kaiser Northern California
Berkeley and San Jose, California

Objective: One of the goals of molecular diagnostics is integration into the clinical team to provide value added experience and personalized information for patient care. This presentation will highlight innovative ways to accomplish this goal in the filed of molecular pathology and cytogenetics.

Design:

- Overview of molecular pathology/cytogenetic testing
- Overview of molecular test ordering process in clinical and pathology practice
- Utilization and consultations service of molecular diagnostics

Materials and Methods:

- Presenting molecular diagnostic testing utilization algorithm
- Evaluating the test request
- Providing consultation for testing service, including recommendation and reflex testing if necessary
- Providing consultation/interpretation for test results
- Providing clinical assessment for patient care management, including prognostic and therapy
- Testing utilization data from UCLA, VA Medical Center Los Angeles and Kaiser Permanente
- Several case studies examples

Results: This presentation will center on molecular pathology and cytogenetic testing utilization in clinical practice. Specifically, participants will come to understand the process of evaluation test requests, providing testing recommendations and implement reflex testing in molecular pathology and cytogenetics. They will also learn how to interpret test results and make clinical assessment for patient care management, including prognosis and therapy.

Conclusions: One of the emerging trends in healthcare is precision medicine and diagnostics, whereby laboratory testing enables tailored diagnosis and treatment. Appropriate utilization of molecular testing is critical in clinical practice to provide cost-effective care and enhance patient experience.

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