COLLEGE of AMERICAN PATHOLOGISTS

Workup of Amyloidosis

Draft Recommendations and Good Practice Statements

Draft Statement	Category/Strength of Recommendation
1. When specimens from surrogate sites are received for detection of systemic amyloidosis, pathologists should evaluate for the presence of amyloid using laboratory validated technique and report technique(s) used in the assessment. *Note:* Surrogate sites include fat pad biopsy, fat pad aspirate, salivary gland biopsy, rectal biopsy, and bone marrow biopsy.	Good Practice Statement
2. In patients strongly suspected of having systemic amyloidosis, when the surrogate biopsy site is negative, pathologist should recommend target organ biopsy. *Note:* Pathologists may also conduct amyloid staining of appropriate archived pathology samples when a surrogate site biopsy is negative.	Good Practice Statement
3. In patients with suspected systemic amyloidosis, pathologists may screen smears of aspirated abdominal fat for detection of amyloid. *Note:* Amyloid screening technique should be validated on smears. *Note:* The yield for amyloid fibril typing is decreased in cell blocks prepared from cytologic specimens.	Conditional Recommendation
4. When evaluating specimens for the presence of amyloid, pathologists should use Congo red staining method. *Note:* Laboratories may use other methods but should validate against Congo red or electron microscopy and must show equivalency.	Conditional Recommendation
5. When assessing Congo red histochemistry, pathologists may add fluorescence microscopy with the tetramethylrhodamine/Texas red filter to increase sensitivity for amyloid detection, if available.	Conditional Recommendation
6. In patients with amyloidosis being considered for therapy, pathologists should determine the fibril protein type.	Good Practice Statement
7. In patients with amyloidosis being considered for therapy to optimize diagnostic yield and tissue utilization, pathologists should use mass spectrometry to identify the fibril protein type. *Note:* In renal amyloidosis, amyloid fibril typing may often be successfully accomplished by immunofluorescence, although reflex to mass spectrometry-based proteomics should be performed in difficult or equivocal cases.	Conditional Recommendation

Certainty of Evidence Grades[1]

Grade	Definition
High	There is high confidence that available evidence reflects true effect. Further research is very unlikely to change the confidence in the estimate of effect.
Moderate	There is moderate confidence that available evidence reflects true effect. Further research is likely to have an important impact on the confidence in estimate of effect and may change the estimate.
Low	There is limited confidence in the estimate of effect. The true effect may be substantially different from the estimate of the effect.
Very Low	There is very little confidence in the estimate of effect. The true effect is likely to be substantially different from the estimate of effect. Any estimate of effect is very uncertain.

Strength of Recommendations[1]

Category	Definition	Rationale
Strong Recommendation	Recommend for or against a particular practice (Can include “must” or “should”)	Supported by high or moderate quality of evidence and clear benefit that outweighs any harms.
Conditional Recommendation	Recommend for or against a particular practice (Can include “should” or “may”)	Some limitations in quality of evidence (moderate to very low), balance of benefits and harms, values, or costs but panel concludes that there is sufficient evidence and/or benefit to inform a recommendation.

References

1. Schuenemann H, Brozek J, Guyatt G, Oxman A, eds; The GRADE Working Group. GRADE Handbook for Grading Quality of Evidence and Strength of Recommendations: Gradepro website. Updated October 2013. Accessed February 29, 2024. https://gdt.gradepro.org/app/handbook/handbook.html