

Tumors of the Epidermal Appendages

Paul K. Shitabata, M.D.

Director of Dermatopathology

Harbor-UCLA Dermatology

Adenoid Cystic Carcinoma vs. Basal Cell Carcinoma

Histopathology	ACC	BCC
Cribriform changes		
Epidermal attachment		
S100		
CEA		

Answers

Histopathology	ACC	BCC
Cribriform changes	+	+ (particularly in adenoid type)
Epidermal attachment	-	+
S100	+	-
CEA	+	-

Associations with the Muir-Torre Syndrome:

- Keratoacanthomas
- Sebaceous hyperplasia
- Adenomatous polyps of the GI tract
- Sebaceous carcinoma
- Sebaceoma

Answers

- Keratoacanthomas
- Adenomatous polyps of the GI tract
- Sebaceous carcinoma
- Sebaceoma

Although any unusual sebaceous proliferation should be considered in the syndrome, sebaceous hyperplasia carries no sinister significance.

Molecular associations:

Disease	Molecular Defect
Muir-Torre Syndrome	
Brooke-Spiegler Syndrome	
Nevus sebaceus	
Cowden's disease	

Answers

Disease	Molecular Defect
Muir-Torre Syndrome	Microsatellite instability and germline mutations in DNA mismatch repair genes hMLH1 and HMSH2
Brooke-Spiegler Syndrome	LOH of CYLD1 (16q12-q13)
Nevus sebaceus	LOH of Ptch gene
Cowden's disease	PTEN (10q22-23)

BCC vs. Trichoepithelioma

Histopathology	BCC	TE
bcl-2		
CD34		
Ptch gene mutations		

Answers

Histopathology	BCC	TE
bcl-2	Diffuse staining	Outermost epithelial layer
CD34	Negative	Focal staining of the fibroblastic stroma
Ptch gene mutations	+	+