

平成29年度石綿関連疾患に係る
 医学的所見の解析調査業務
 (肉腫型中皮腫に関する調査編)

公益財団法人がん研究会がん研究所
 石川 雄一

Differential diagnosis of mesothelioma from angiosarcoma using immunohistochemistry

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肉腫様中皮腫でケラチンが陽性→診断の鍵
 肉腫様中皮腫 (真の)肉腫では殆ど発現しない

4.7%

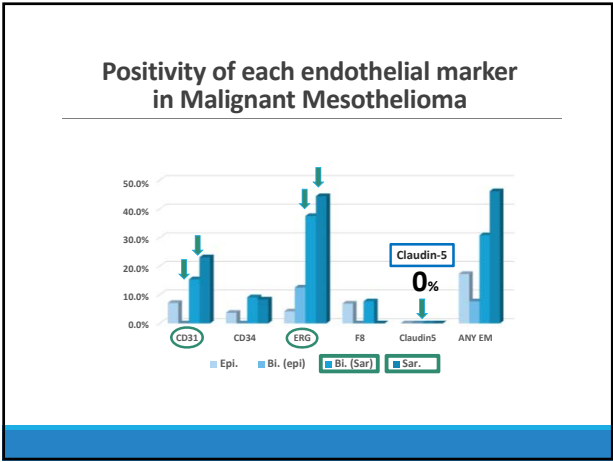
ケラチンを発現する肉腫の一つ
 血管肉腫のケラチン陽性率

35%

84.6-93%^{3,4)}

Histological subtypes of MM	
mesothelioma	n
Epithelioid	29
(poor differentiation) (12)	
Biphasic	13
Sarcomatoid	13
Total	55

IHC: specific markers of each tumor	
Positive mesothelioma markers	
■ Calretinin	
■ WT-1	
■ EMA-m	
Positive angiosarcoma markers	
◆ CD31	...conventional
◆ CD34	
◆ ERG	
◆ Factor VIII	
◆ Claudin5	...check!!



High sensitivity and specificity in AS: Claudin-5

Marker	Angiosarcoma					
	Sensitivity	Specificity for Epi. MM	Specificity for Bi. MM(epi)	Specificity for Bi. MM(Sar)	Specificity for Sar. MM	Specificity for MM (ALL)
CD31	98	93	100	85	77	87
CD34	83	96	100	91	92	94
ERG	100	96	88	63	56	80
F8	69	93	100	92	100	94
Claudin-5	100	100	100	100	100	100

Claudin-5 is useful negative-marker of mesothelioma for excluding angiosarcoma.

Mesothelial marker-positive cases in AS

Markers	Angiosarcoma		
	Positive	Cases	Specificity(%)
Calretinin	0	39	100
WT-1	①	39	97
D2-40	18	34	47
EMA-m	①	39	97

【Case】

① Angiosarcoma of the kidney
WT-1: Weakly positive

② Angiosarcoma of the visceral pleura (or lung)
EMA-m: positive

