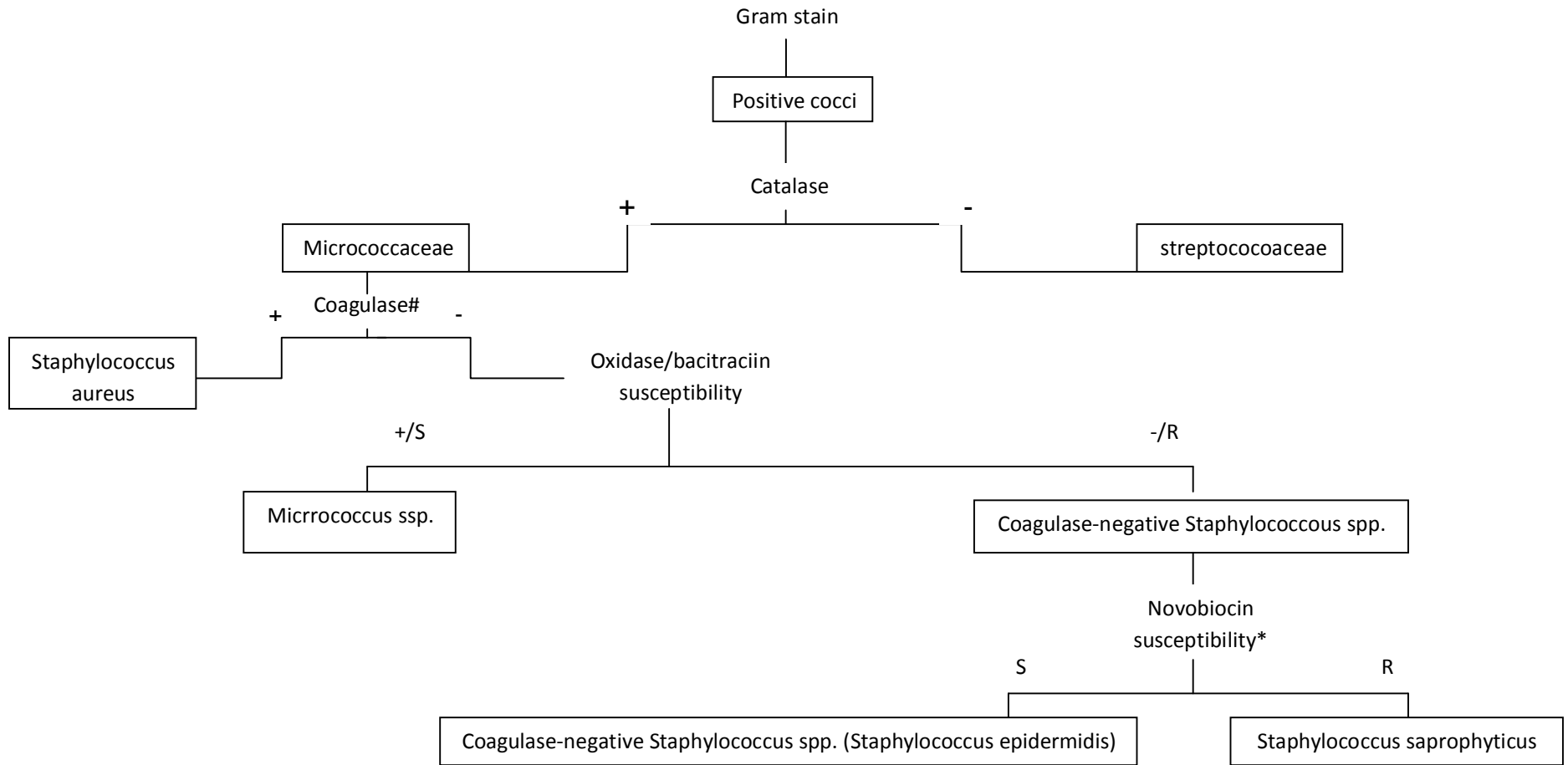


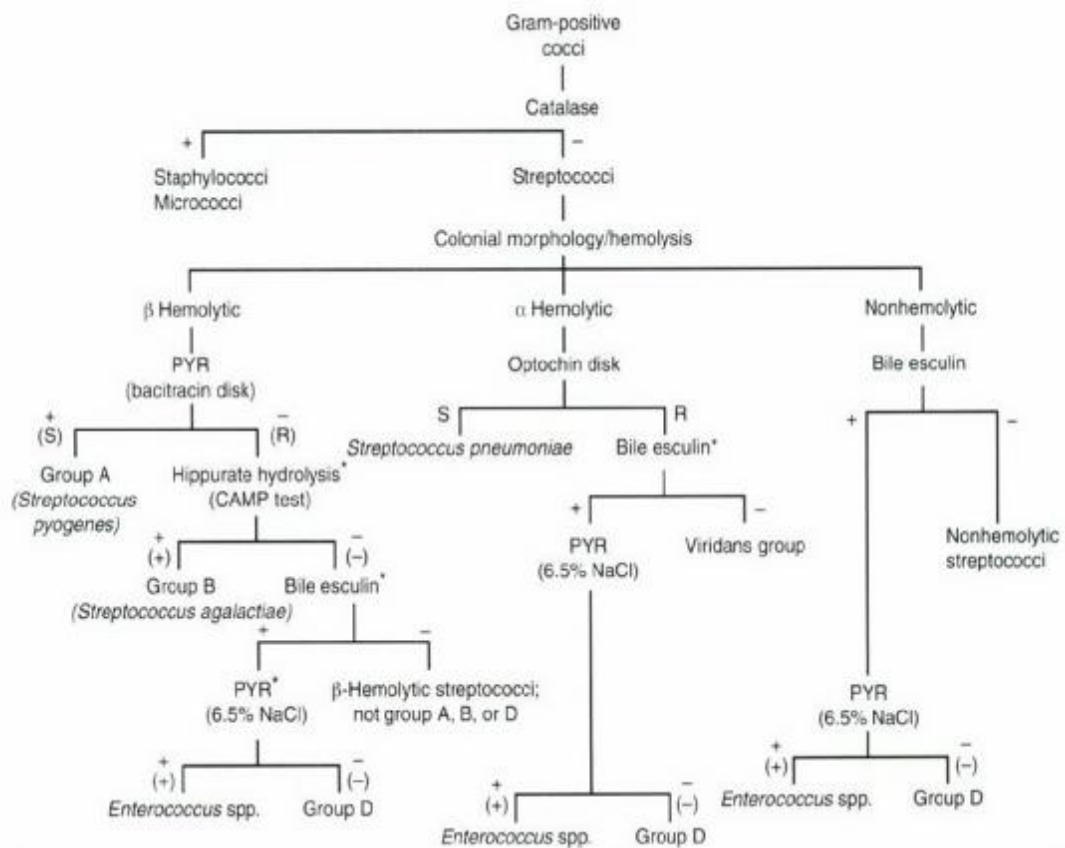
چارت شناسائی گونه های استافیلوکوک



Novobiocin susceptibility → S:16mm ≤ *

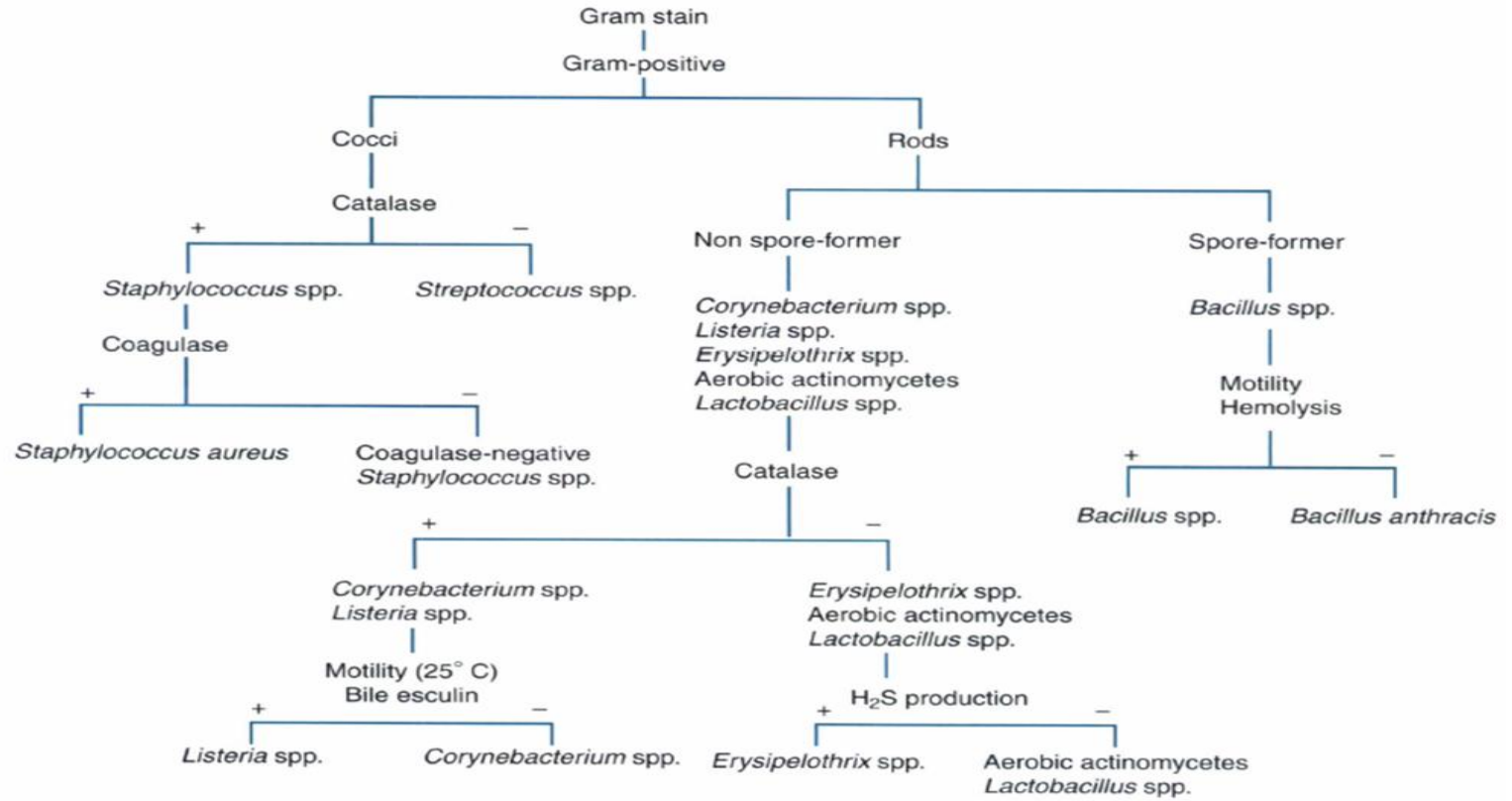
علاوه بر S.aureus، S.lugdunensis، S.intermedius، S.schleferi و S.tryicus نیز کوآگولاز مثبت میباشند.

چارت شناسایی کوکسی های گرم مثبت کاتالاز منفی

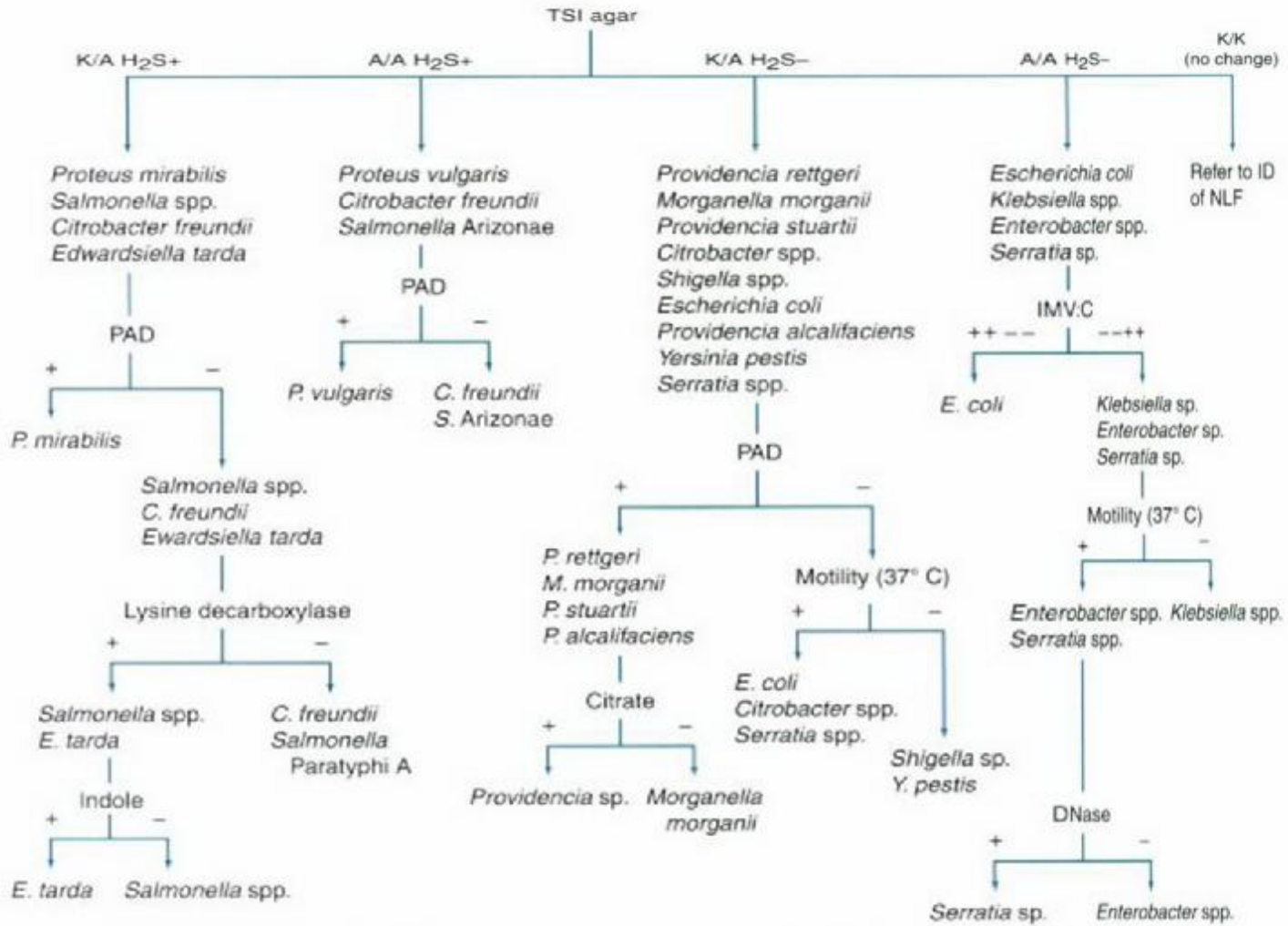


*Optochin disk $\geq 14\text{mm}$:S $< 9\text{mm}$:R 9-13mm:Do Bile esculin

چارت شناسائی باسیل های گرم مثبت



چارت تشخیص احتمالی انتروباکتریاسه ها در برخورد با آگار TSI



- شناسایی گونه های انتروباکتریاسه با توجه به واکنش آنها در محیطهای TSI و LIA

A, Acid

@, acid and gas production

H_2S , hydrogen sulfide

K, alkaline

LIA. Lysine iron agar

NC. no change

TSI. triple sugar iron agar

TSI Reactions [†]	LIA Reactions [†]	Possible Identification
K/Ⓐ or K/A H_2S +	K/K or K/NC H_2S +	<i>Salmonella</i> spp. <i>Edwardsiella</i> spp.
K/A H_2S +	K/K or K/NC H_2S +	<i>Salmonella</i> spp. (rare)
K/Ⓐ	K/K or K/NC	<i>Salmonella</i> spp. (rare)
K/A	K/K or K/NC H_2S +	<i>Salmonella typhi</i> (rare)
K/Ⓐ	K/K or K/NC	<i>Salmonella</i> spp. (rare)
K/Ⓐ	K/A H_2S +	<i>Salmonella paratyphi</i> A (usually H_2S -)
K/Ⓐ	K/A or A/A	<i>Escherichia coli</i> <i>Salmonella paratyphi</i> A <i>Shigella flexneri</i> 6 (uncommon) <i>Aeromonas</i> spp. (oxidase-positive)
K/A	K/K or K/NC	<i>Plesiomonas</i> sp. (oxidase-positive) <i>Salmonella typhi</i> (rare) <i>Vibrio</i> spp. (oxidase-positive)
K/A	K/A or A/A	<i>Escherichia coli</i> <i>Shigella</i> groups A-D <i>Yersinia</i> spp.
A/Ⓐ H_2S +	K/K or K/NC H_2S +	<i>Salmonella</i> spp. (rare)
A/Ⓐ	K/A or A/A	<i>Escherichia coli</i> (rare)
A/A	K/A or A/A	<i>Escherichia coli</i> <i>Yersinia</i> spp. <i>Aeromonas</i> spp. (oxidase-positive) <i>Vibrio cholerae</i> (rare, oxidase-positive)
A/A	K/K or K/NC	<i>Vibrio</i> spp. (oxidase-positive)

مشخصات بیوشیمیائی گونه های انتروباکتریاسه

Tests or Substrate	Escherichieae	Edwardsielleae	Citrobacteriaceae	Salmonelleae*	Klebsielleae	Proteeae†	Yersinieae
Hydrogen sulfide (TSI agar)	-	+	+ or -	+	-	+ or -	-
Urease	-	-	(+*) or -	-	- or (+)	+ or -	+
Indole	+ or -	+	- or +	-	-	+ or -	+ or -
Methyl red	+	+	+	+	-	+	+
Voges-Proskauer	-	-	-	-	+	-	-
Citrate (Simmons)	-	-	+	+	+	d	-
KCN	-	-	+ or -	-	+	+	-
Phenylalanine deaminase	-	-	-	-	-	+	-
Mucate	d	-		d	+ or -	-	
Mannitol	+ or -	-	+	+	+	- or +	+

Modified from Ewing WH: *Edwards and Ewing's identification of Enterobacteriaceae*, ed 4, East Norwalk, Conn, 1986, Appleton & Lange.

+, ≥90% positive within 1 or 2 days; (+), positive reaction after 3 or more days (decarboxylase tests: 3 or 4 days); -, ≥90% no reaction in 30 days; + or -, most cultures positive, some strains negative; - or +, most strains negative, some cultures positive; d, different reactions, +, (+), -, +*, weakly positive reaction TSI, triple sugar iron; KCN, potassium cyanide.

**Salmonella* serovar Typhi and Paratyphi and some rare serovars fail to use citrate in Simmons medium. Cultures of serovar Paratyphi and some rare serotypes may fail to produce hydrogen sulfide; an occasional strain of almost serotype of *Salmonella* genus may be hydrogen sulfide negative.

†Some cultures of *Proteus mirabilis* may yield positive Voges-Proskauer tests.