Das nierenkranke Kind

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Dr. Anita Mang, MRCPCH
Ärztin für Allgemeinmedizin
Fachärztin für Kinder- und Jugendheilkunde
www.drmang.at/sagam2018

Kindernephrologie & Hausarzt

Ziel: Blick für kindernephrologische Krankheitsbilder schärfen

Nicht Ziel: systematische Auflistung oder Details aller kindernephrologischen Erkrankungen

Werkzeuge

<u>Anamnese + klinische Untersuchung</u>

Wasser:	**Blutdruck**, Trinkmenge / Harnmenge / Ödeme
Azidose/Elyte:	Schwäche, Krämpfe, evt. azidotische Atmung
Anämie:	Blässe (Petechien/Purpura beachten)
Gedeihstörung:	**Perzentilen**! Genitale/Skelett beachten

<u>Labor in der Praxis:</u>

BB (Reti), Harnstoff/Creatinin, Na, K, Ca, Ph,(Astrup)
ggf. Albumin, (Complement),…
Strep A Schnelltest, Albustix

Werkzeuge

Wie komme ich zum Harn?

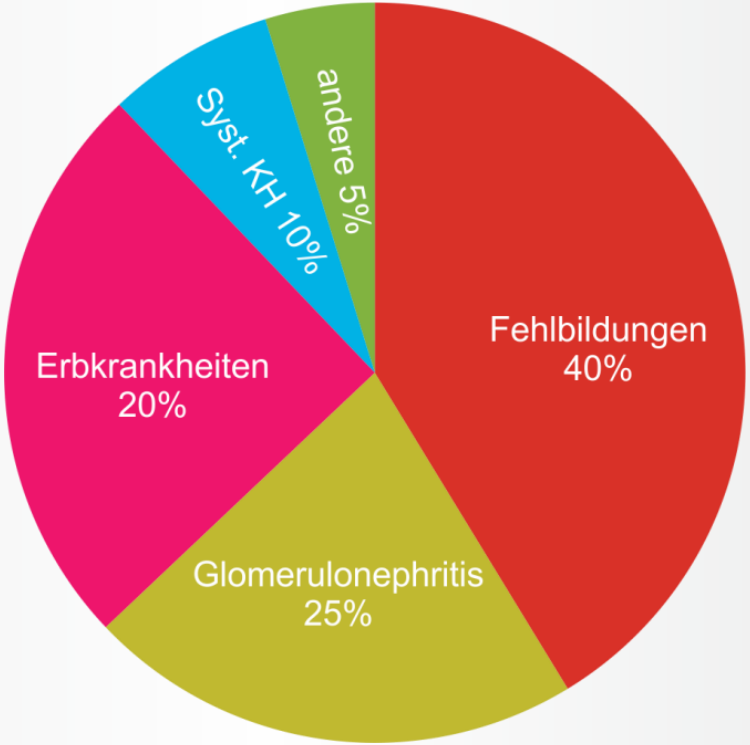
kontinent:

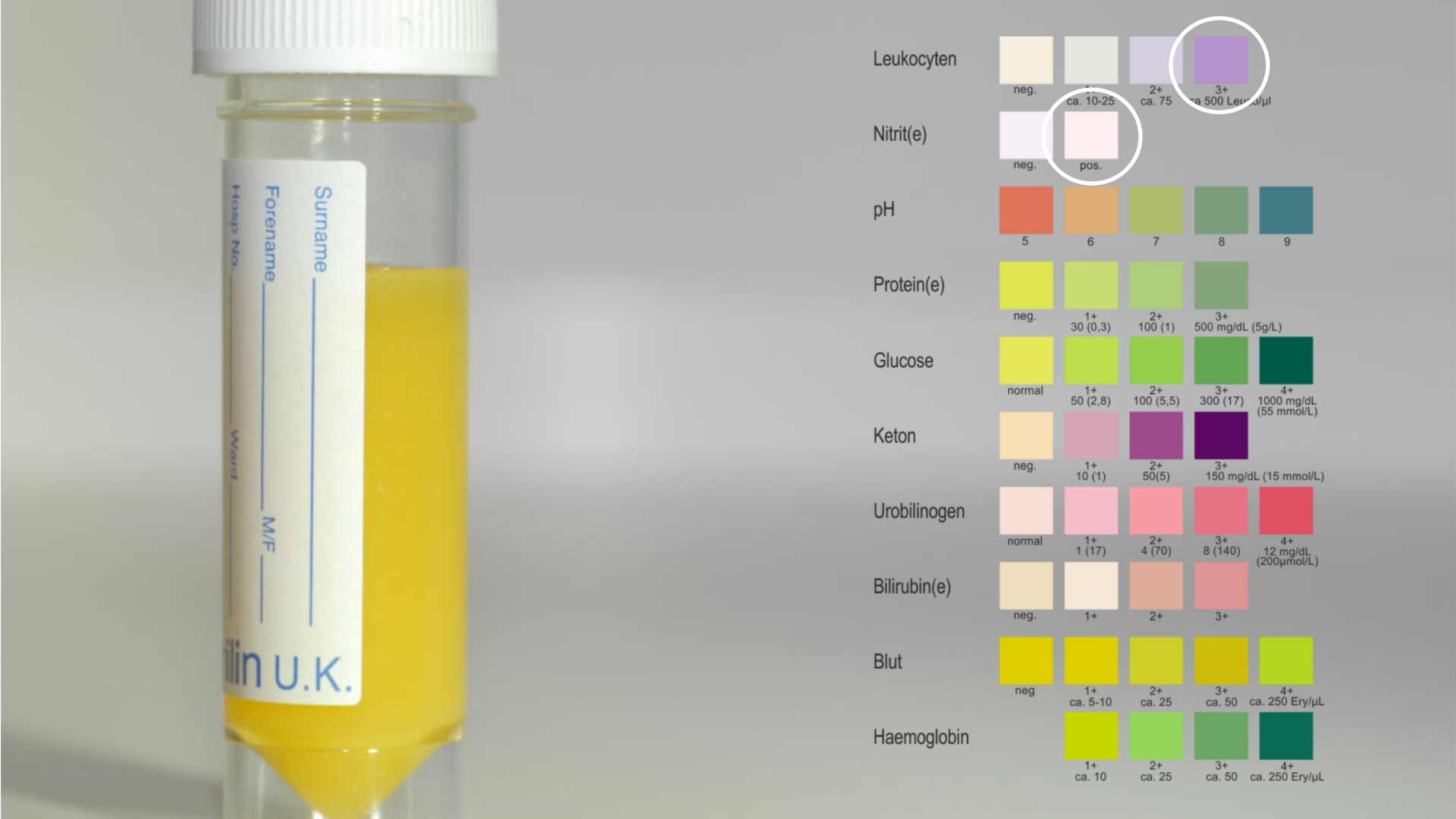
- Topferlharn (ab ca. 3a)
- Mittelstrahlharn (ab ca. 5a)

noch nicht kontinent

- Harn-Sackerl
- „Clean catch“
- Katheter (Char. 8 Absaugkatheter = blau)

CKD – Ursachen im Kindesalter

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Forename
M/F
Hosp No.
Ward
U.K.
Leukocyten
neg.
1+
ca. 10-25
2+
ca. 75
3+
Nitrit(e)
neg.
pos.
pH
5
6
7
8
9
Protein(e)
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30 (0,3)
2+
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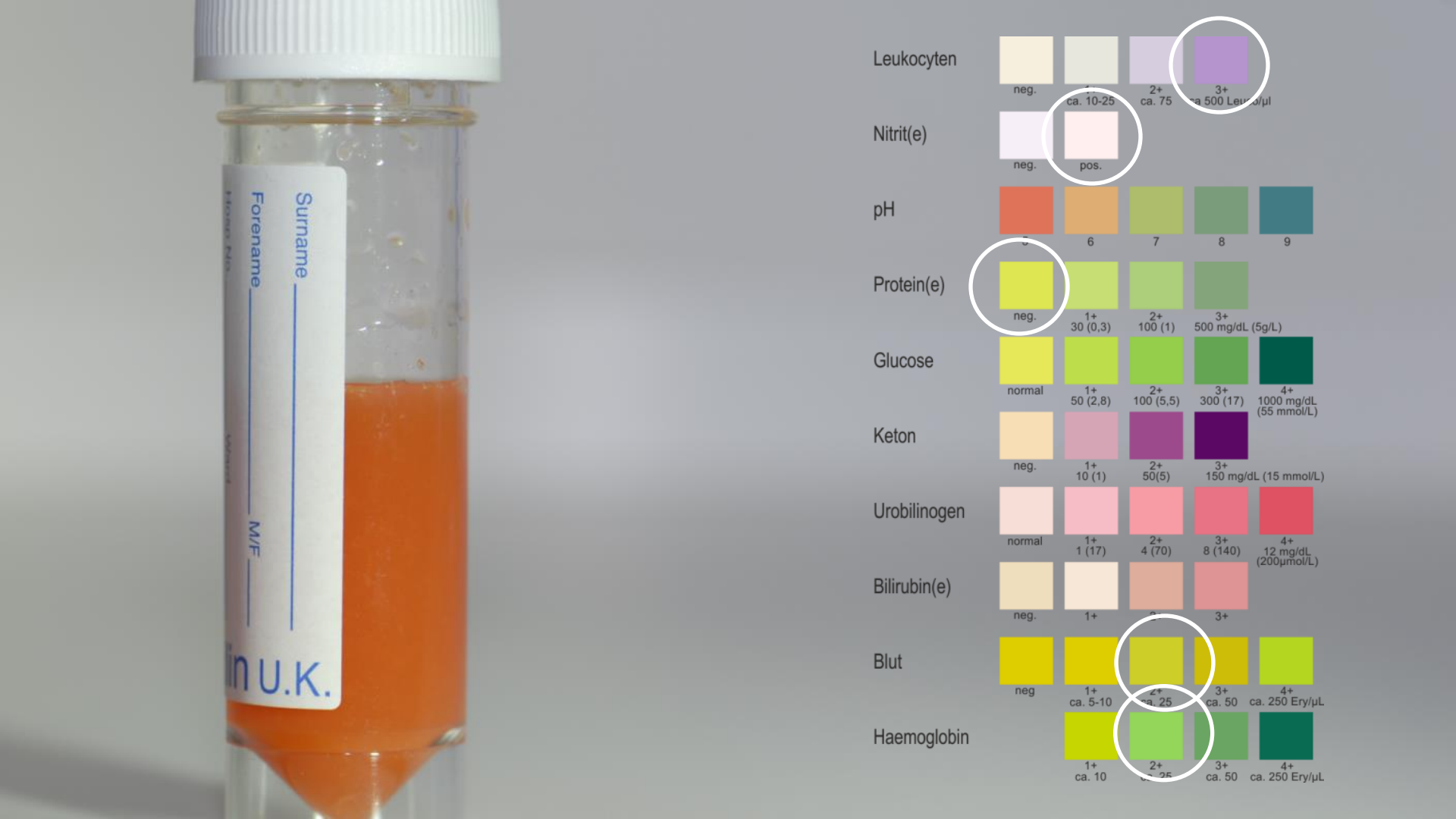
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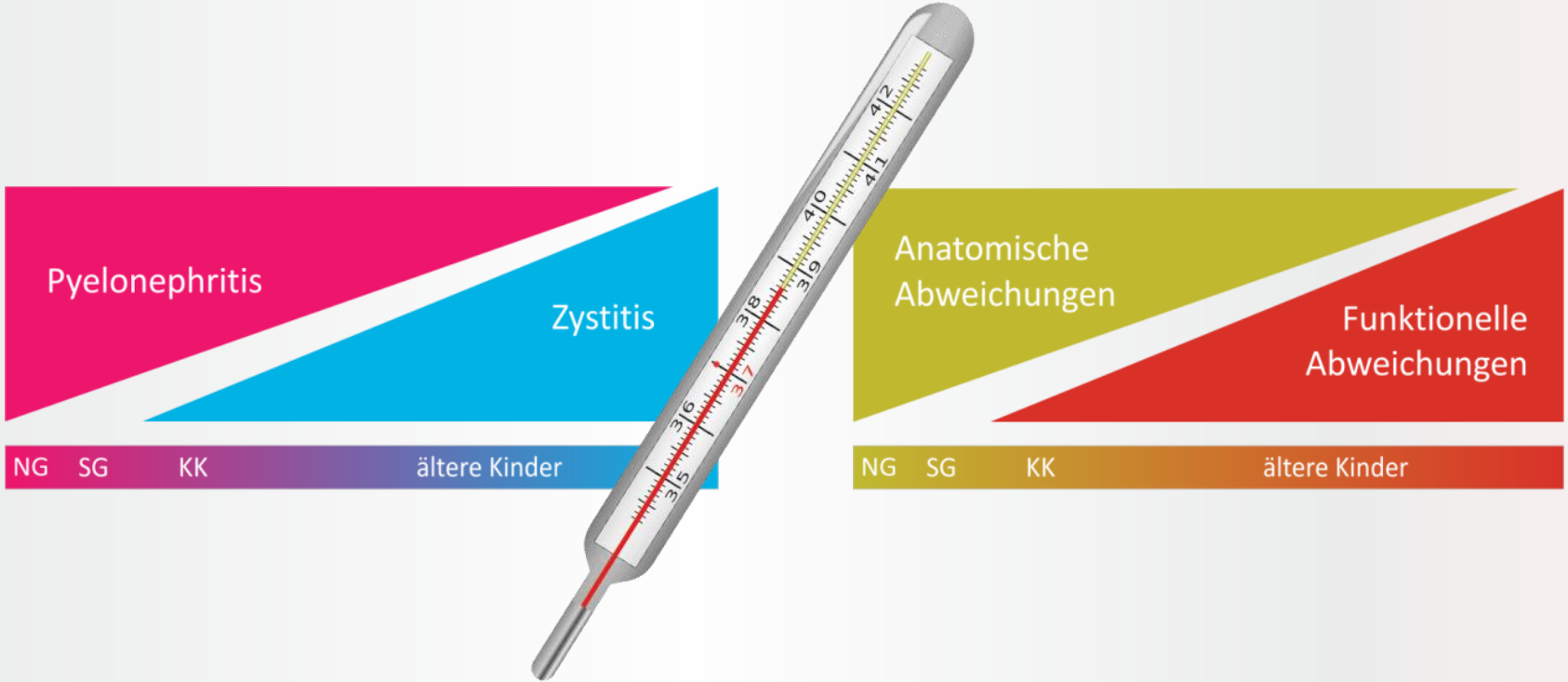
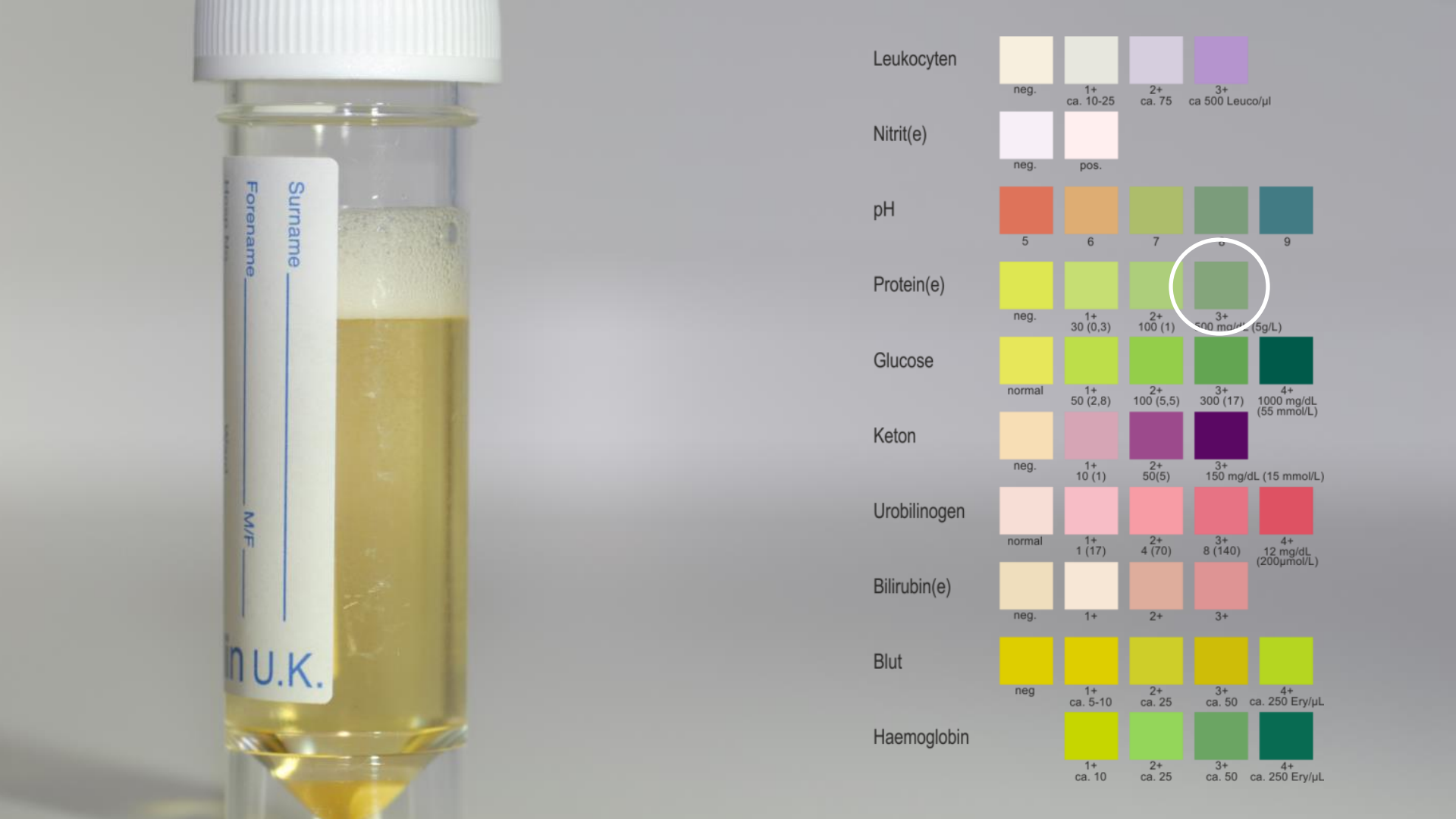
Besonderheiten beim Kind

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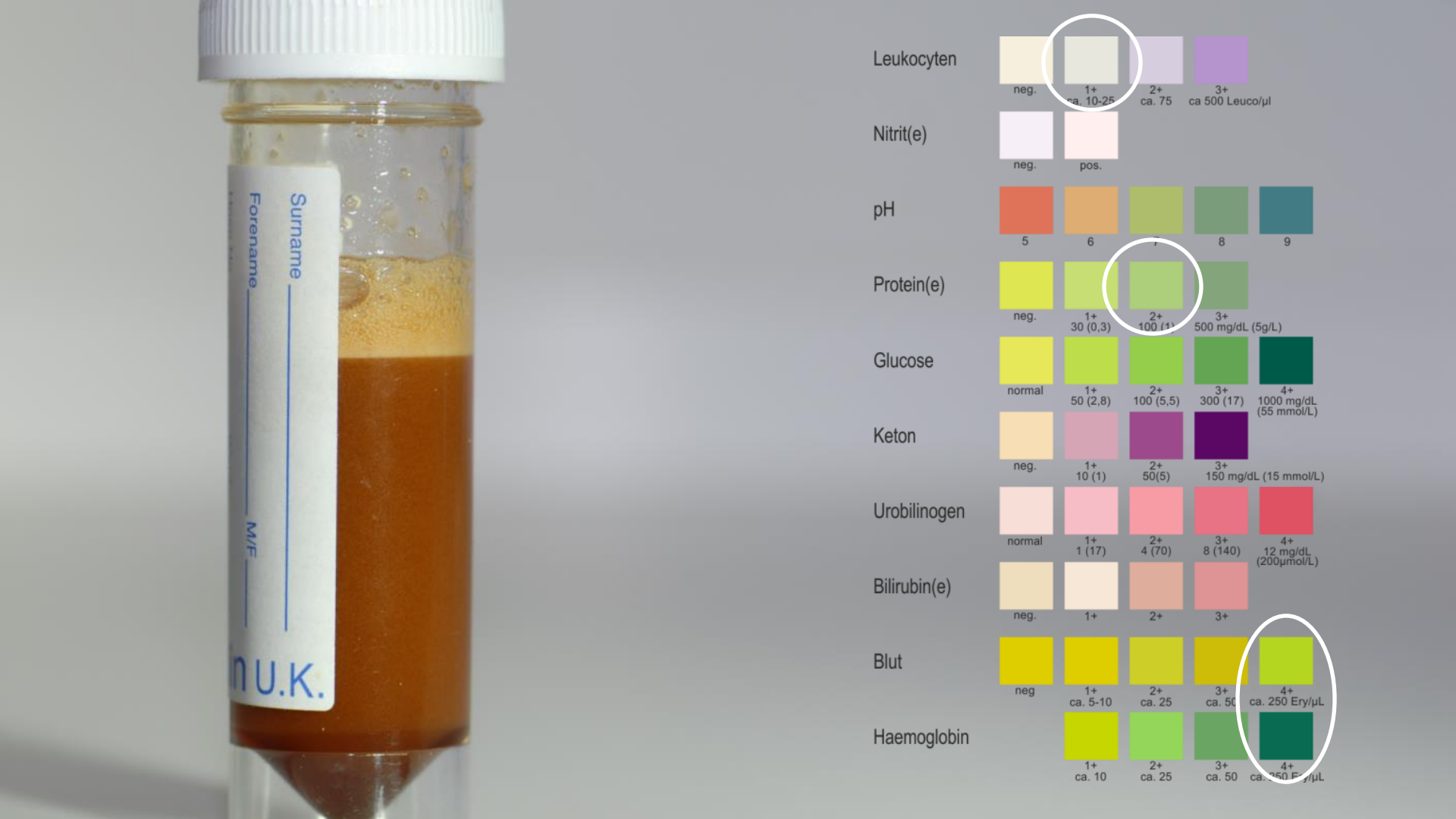
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3+
ca. 50

ID
OP
Strep A
C
T
Read result
after 5 min.
Negative
C
T
Positive
C
T
Invalid
C
T
S

ß-hämolysierende Streptokokken der Serogruppe A

akute Erkrankung
= direkte Invasion

1. Tonsillopharyngitis, Peritonsillarabszess
2. Otitis media
3. Erysipel, Phlegmone
4. Impetigo contagiosa
5. nekrotisierende Fasziitis
6. Bronchopneumonie, Empyem
7. Sepsis (Puerperalfieber)
8. Meningitis, Hirnabszess
9. Osteomyelitis

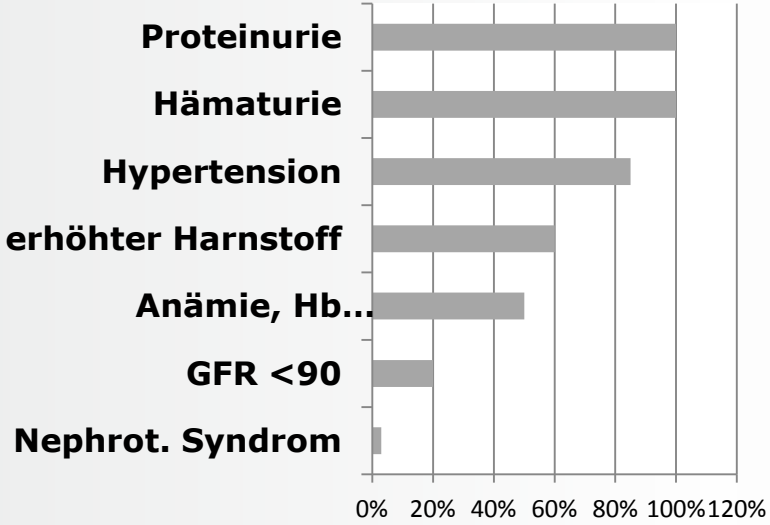
= Toxin

1. Scharlach
2. Toxic-Shock-like-Syndrom

späte Komplikationen
= antikörpervermittelte Spätreaktion

1. akute Glomerulonephritis (PSGN)
   - nephritisch nephrotisches S. (2-4%)
   - RPGN (rapid progessive GN) (selten)
2. Post-Streptokokken Arthritis
3. rheumatisches Fieber
   (Carditis, Arthritis, Erythema marginatum, Chorea minor (Sydenham))
4. PANDAS (pediatric autoimmune neuropsychiatric disorder associated with group A streptococci)

Post-Streptokokken Glomerulonephritis (PSGN)



Seltene Komplikationen:

- neurologisch: hypertensive Krise / PRES, Krampfanfälle, Visusveränderung
- cardial: akute Herinsuffzizienz/Lungenödem
- renal: RPGN (rapid progr. GN), ESRD (Endstage renal disease)
- dermal: Purpura Schönlein Henoch – Effloreszenzen
- Blut: Autoimmunhämolytische Anämie
- Rezidiv

Typischer Verlauf PSGN

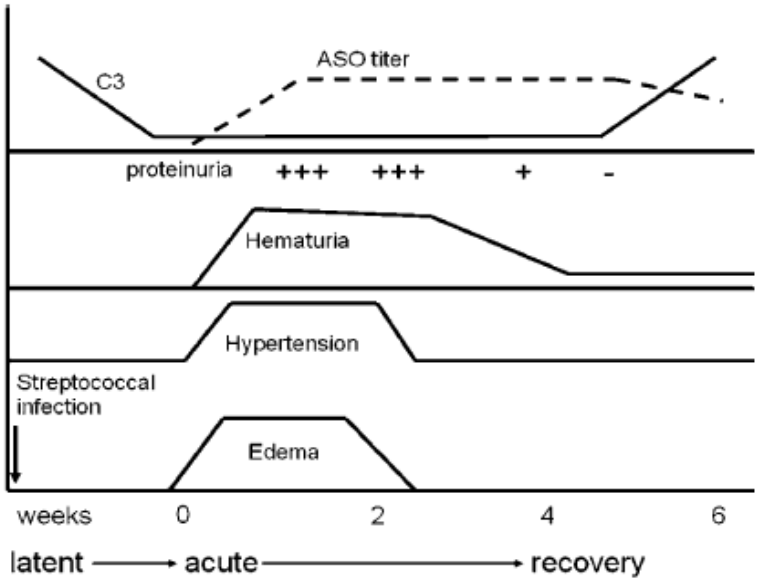
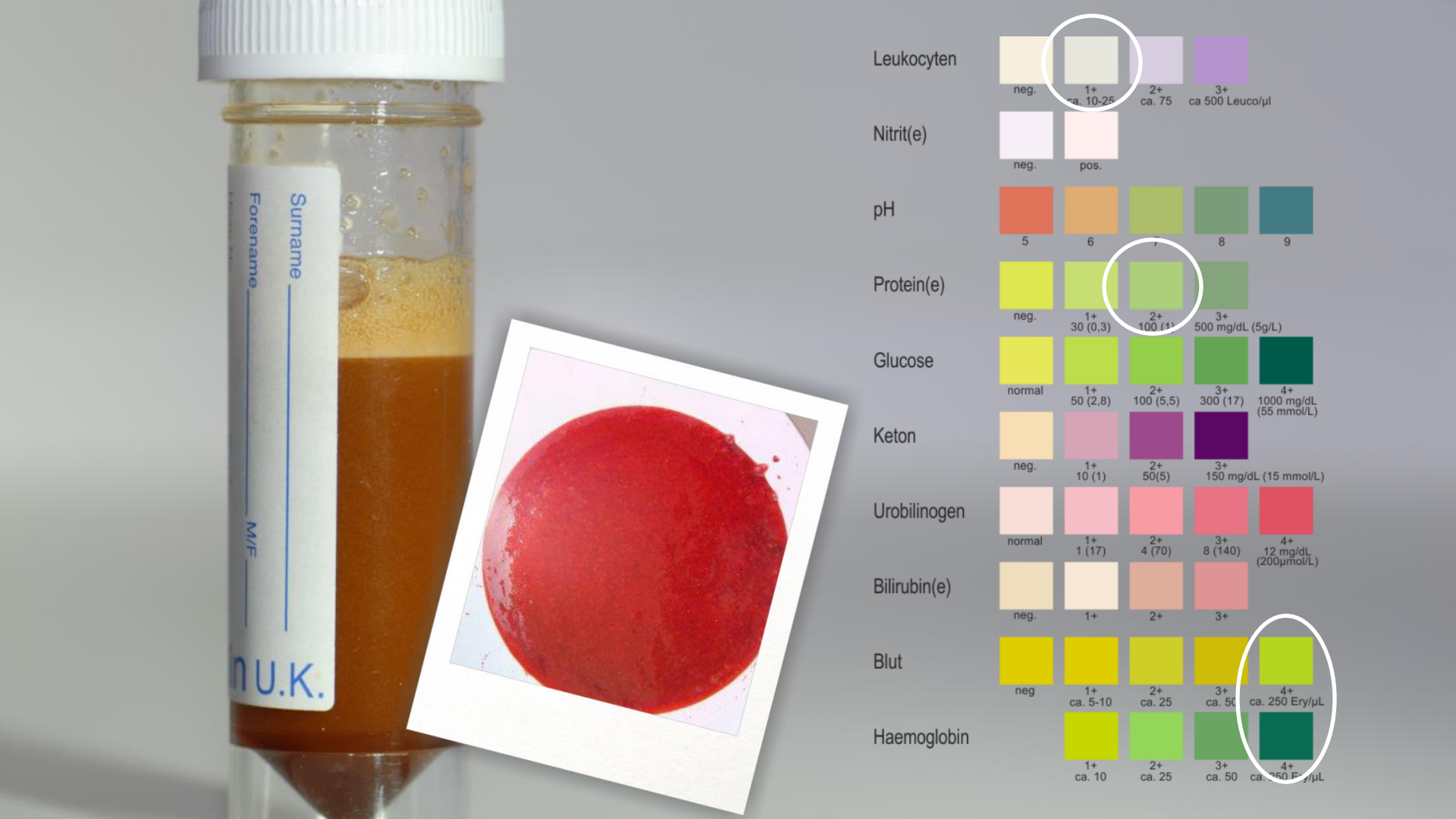


Fig. 1 Summary of the typical clinical course of post-streptococcal acute glomerulonephritis (PSAGN)

Quelle: Post-streptococcal acute glomerulonephritis in children: clinical features and pathogenesis, Pediatr Nephrol 2010, Review, DOI 10.1007/s00467-010-1554-6

DEEPBLUE
SAILING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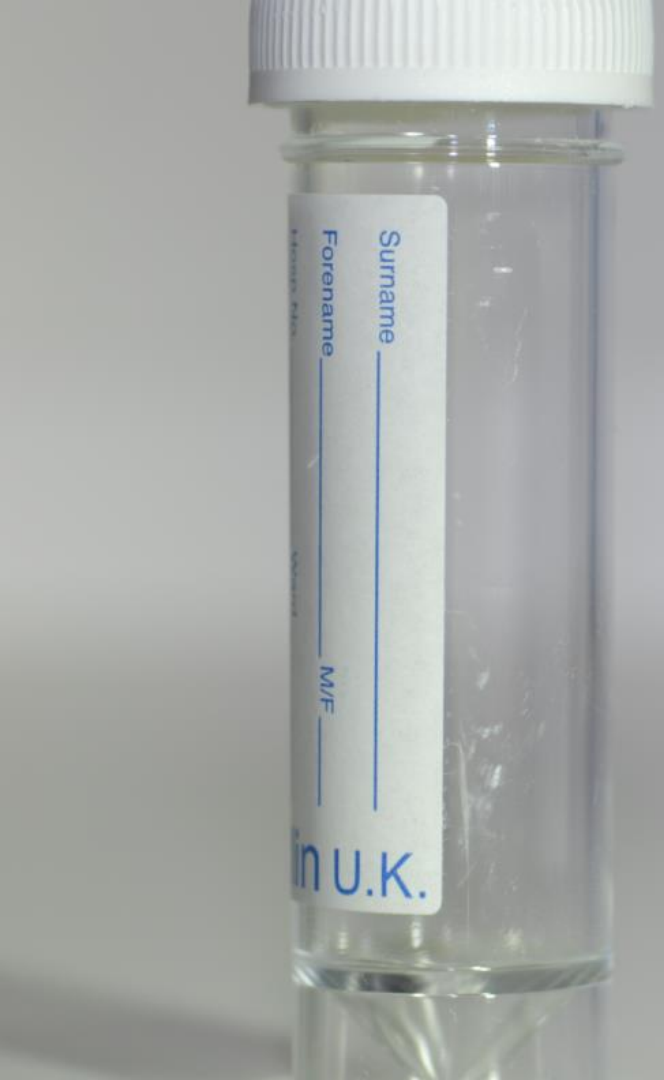
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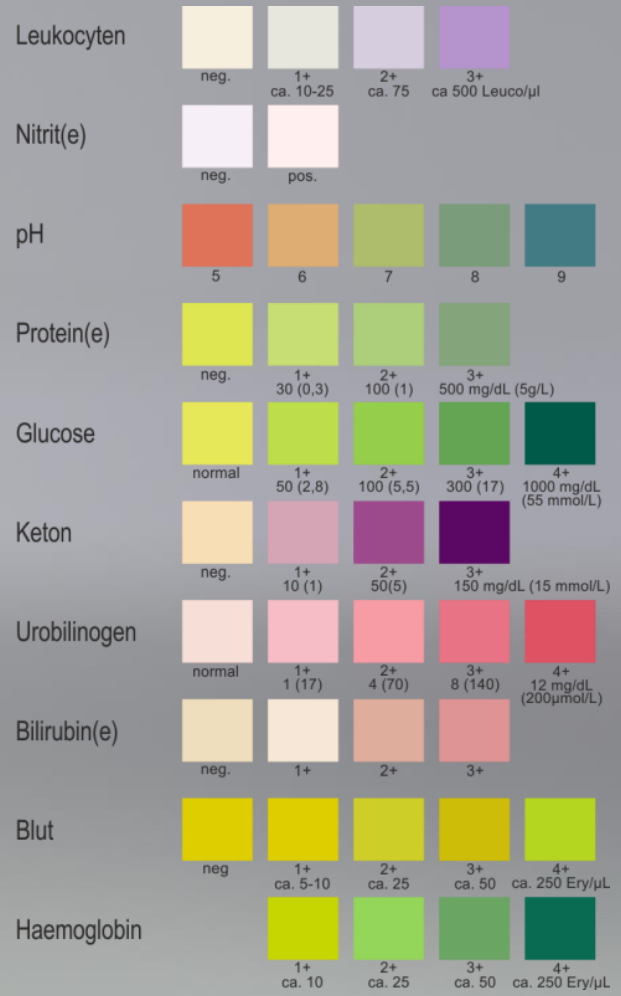
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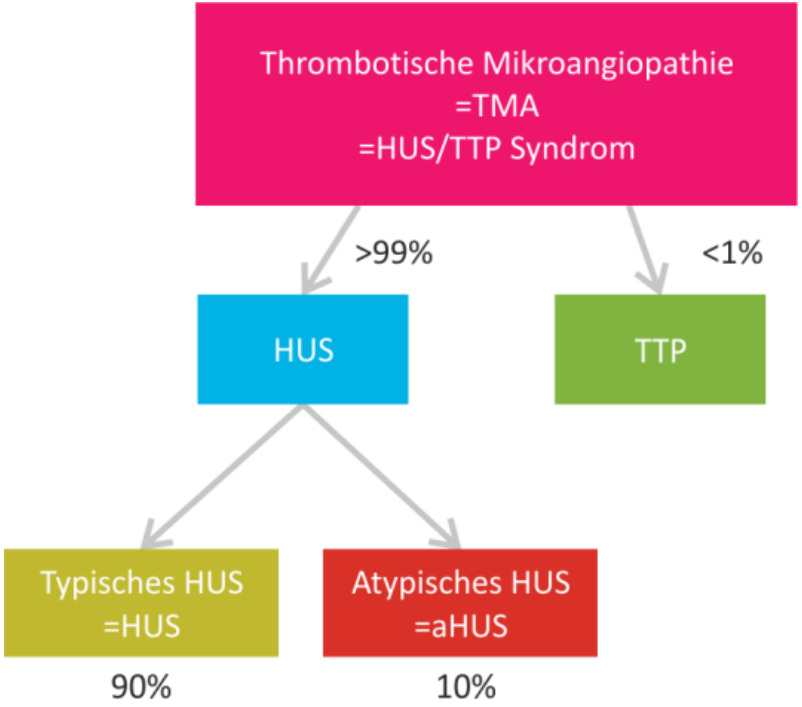
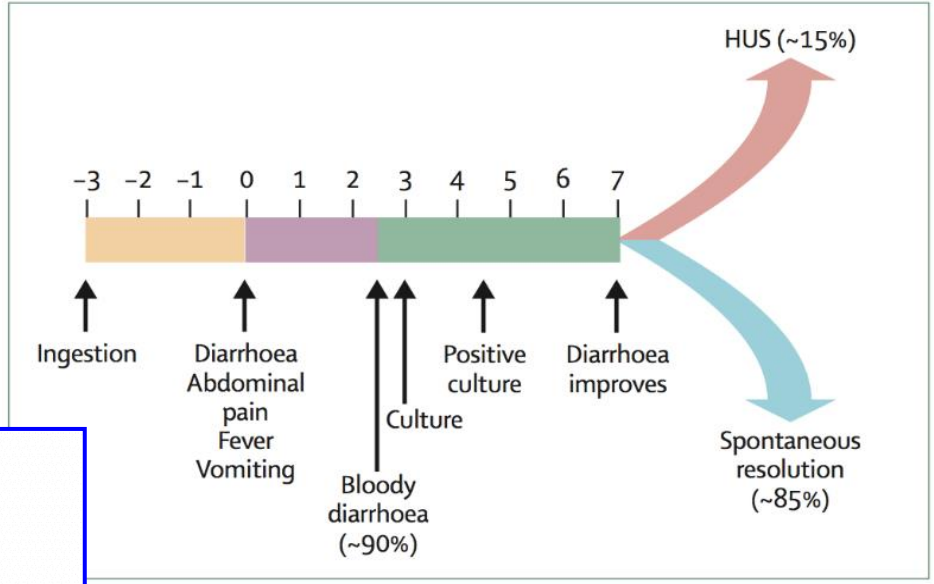
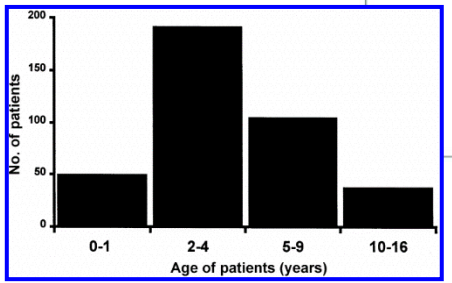
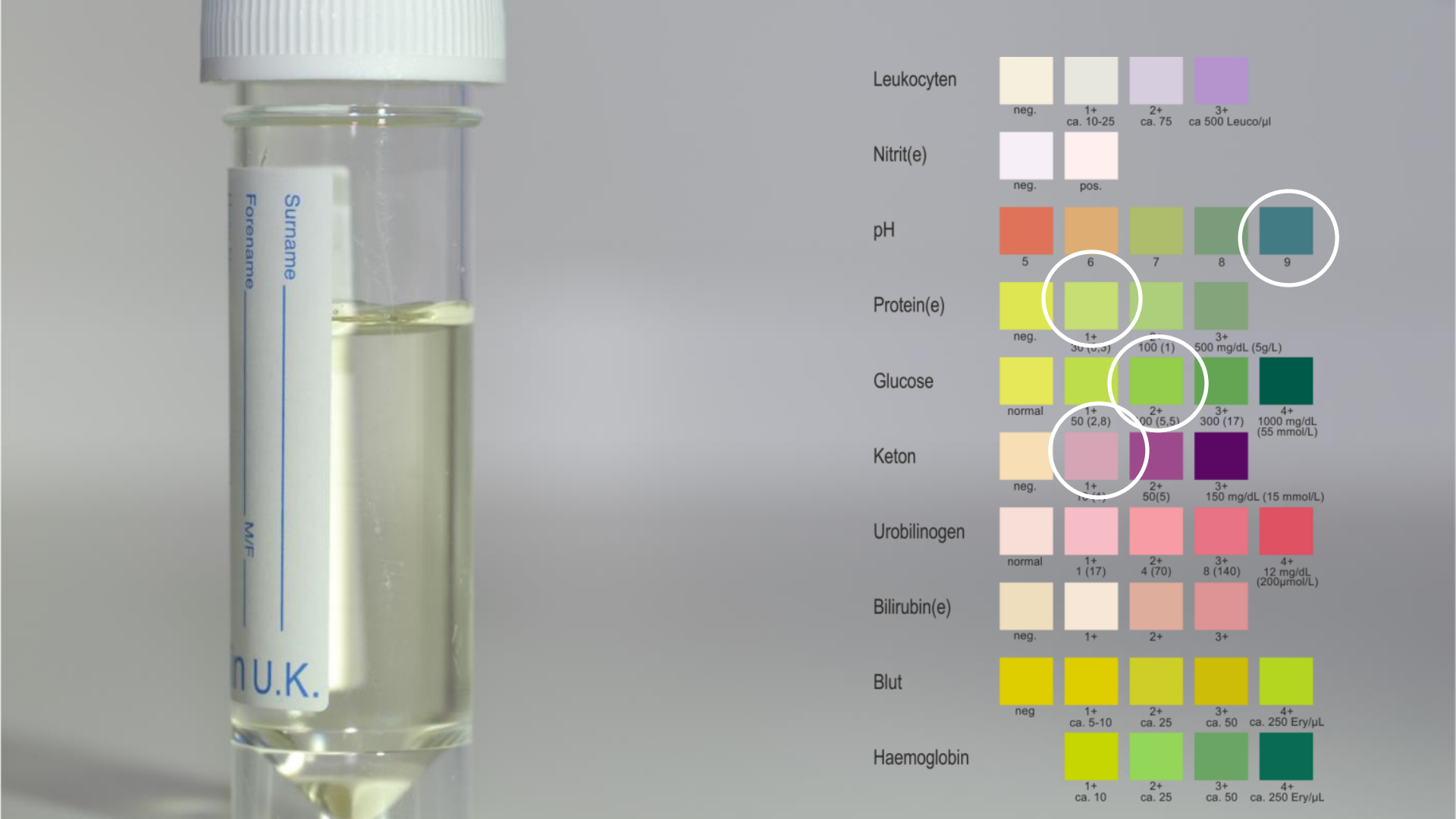

Thrombotische Mikroangiopathie
=TMA
=HUS/TTP Syndrom
>99%
<1%
HUS
TTP
Typisches HUS
=HUS
Atypisches HUS
=aHUS
90%
10%

Verlauf shigatoxin-assoziiertes HUS





Quelle: Tarr PI et al. Lancet 2005;365:1073-86.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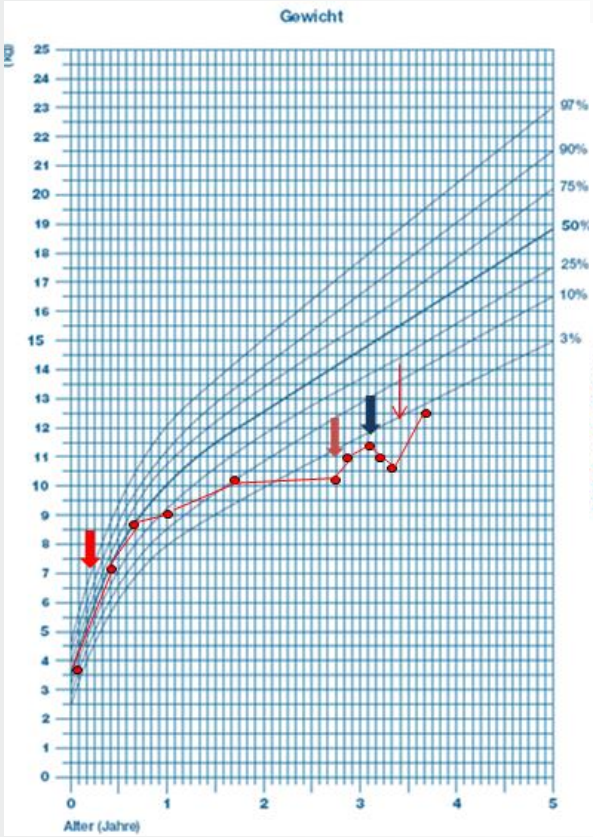

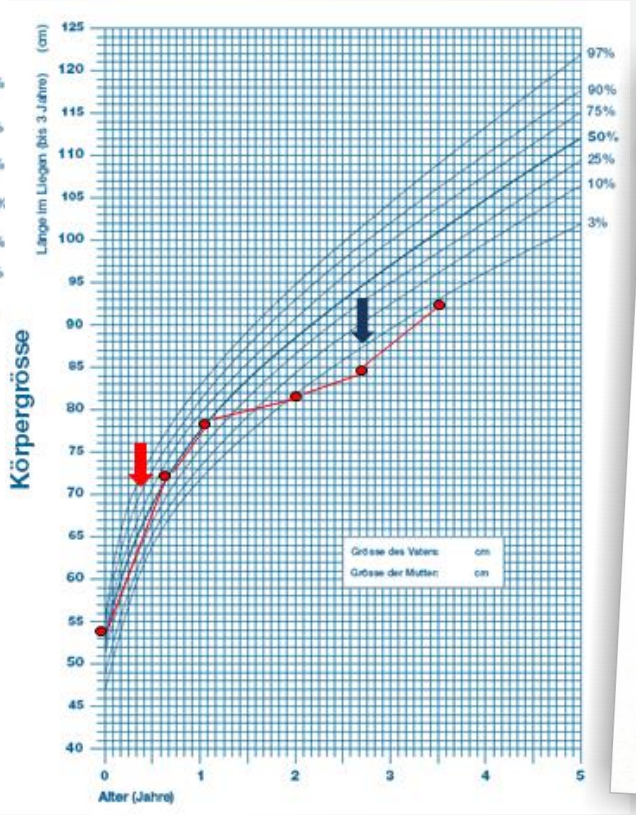

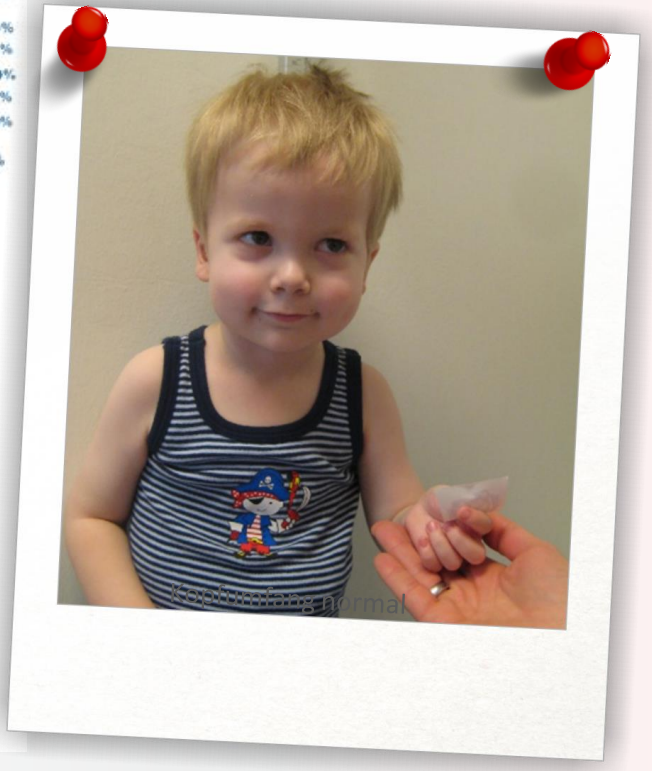

? Erkrankungsbeginn

? Bartter-like Syndrom

Cysteamin-Therapie

PEG-Sondenanlage

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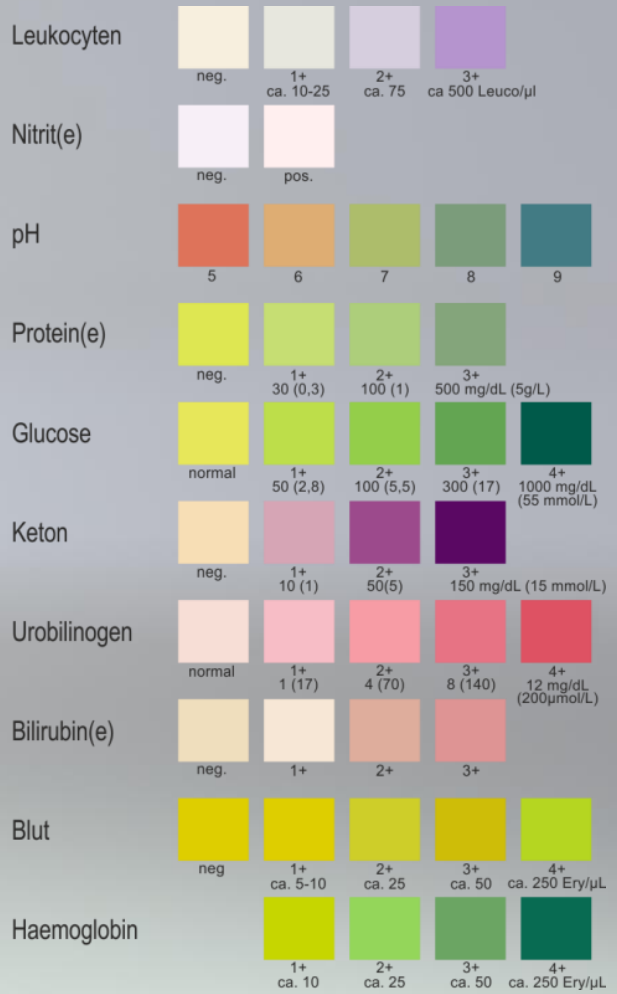
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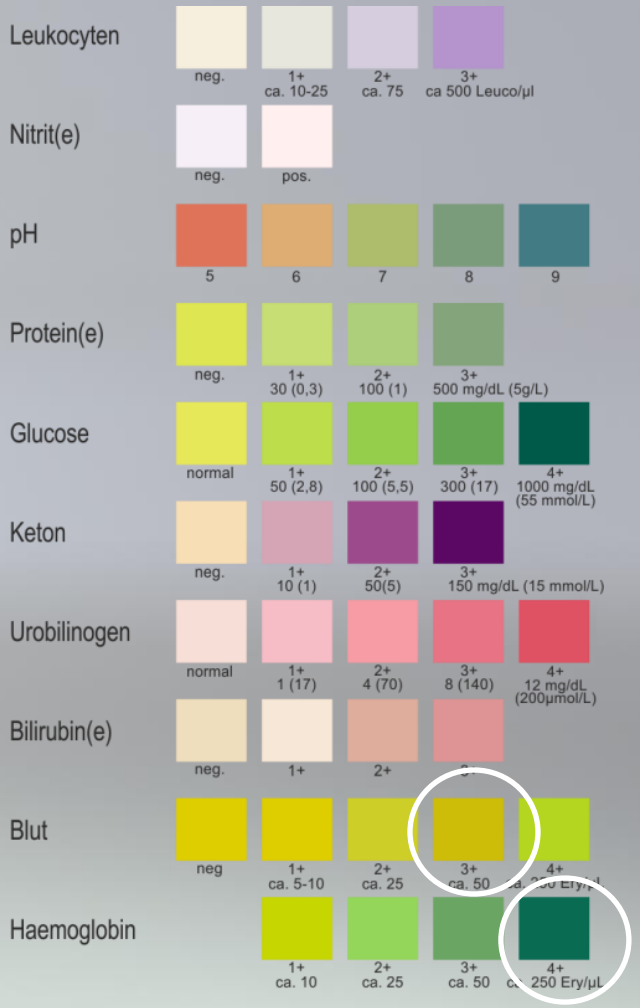
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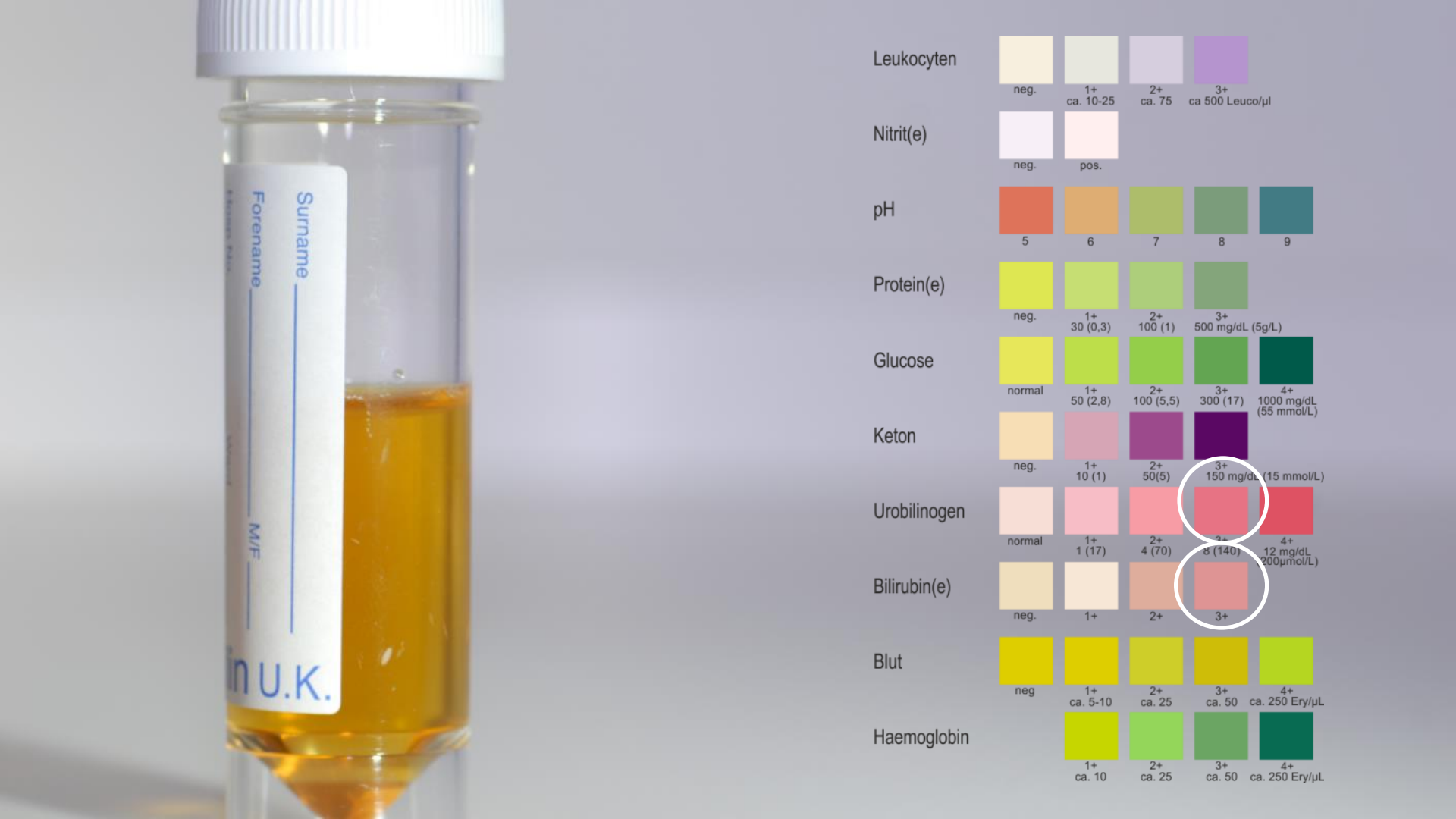
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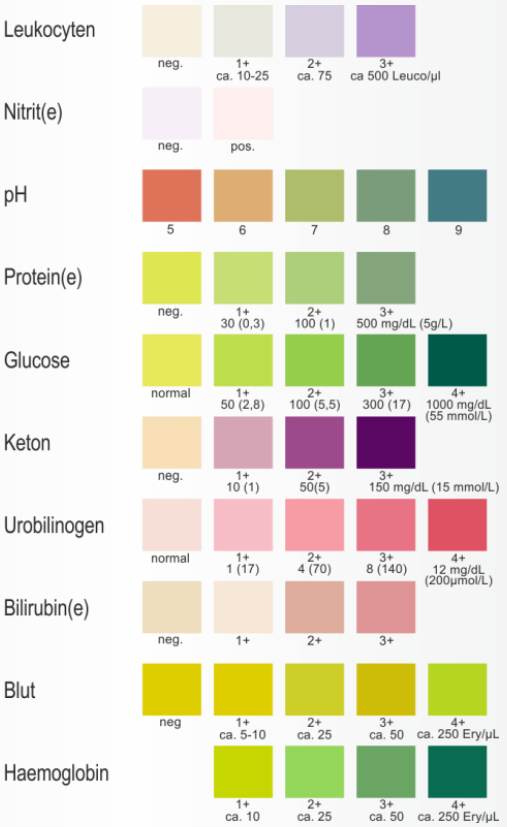
Harnstreifen



→Harnwegsinfekt?

→ Azidose?

→nephrotisches Syndrom?

→Diabetes / Tubulopathie?

→Katabolie?

→Leber?

→Harnwegsinfekt, Stein, Glomerulonephritis?

→Wasserhaushalt

Take home

Harn = Spiegel der Niere

= schnell, aussagekräftig, billig

Dran denken beim Kind:

1. Harnwegsinfekt (Fehlbildung!)
2. Niereninsuffizienz
3. nephrotisches Syndrom
4. nephritisches Syndrom, v.a.
   - Post-Streptokokken GN
   - Purpura Schönlein Henoch
   - IgA Nephropathie
5. Thrombotische Mikroangiopathie (v.a. HUS)
6. Tubulopathien
7. Nierensteine, Nephrocalcinose
8. Cystische Nierenerkrankungen
9. bunter Harn: “nicht immer ist die Niere schuld”