


Veterinary Diagnostics – Trends and evolving



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Clinical Scenario

- Companion animal care
- Farm animal care
- Equine, exotics...



Clinical Scenario...

- Farm animal treatment – largely government sector veterinarians
- Pet animal care –Cosmopolitan cities
–Primarily private sector

Pet Parenting – Indian Scenario



- COVID times – phenomenal increase in pet parents
- Pet dog population -19.3 million – 2018
- Expected to grow to 31 million by 2023 (statista.com)
- Phenomenal increase recorded in tier 2 and tier 3 cities also



Diagnostics

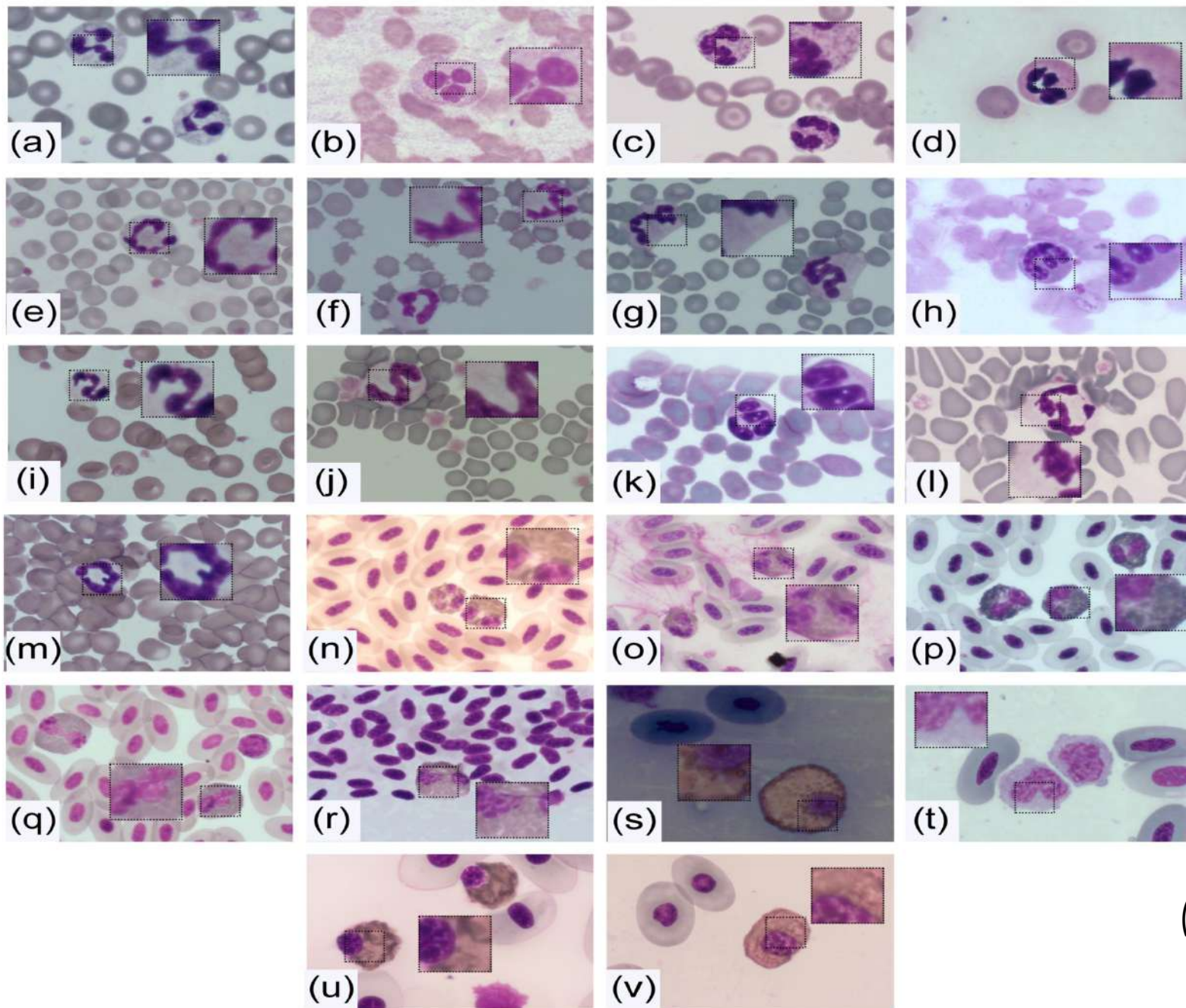
- Laboratory support

- Imaging

Veterinary Laboratory Medicine

- Basic Haematology equipment- earlier – human machines
- Dedicated veterinary machines- with specific software for different species – far and few between





Morphology of neutrophils and heterophils of distinct species

(a) Human, (b) Geoffroy's spider monkey, (c) Mantled howler monkey, (d) Sloth, (e) Cow, (f) Pig, (g) Horse, (h) Skunk, (i) Dog, (j) Cat, (k) Squirrel, (l) Common opossum, (m) Mouse, (n) Pauraque, (o) Woodpecker, (p) Ara, (q) Guatemalan screech-owl, (r) Common snipe, (s) Boa, (t) Iguana, (u) Common snapping turtle, (v) Painted wood turtle

(Fingerhut *et al.*, 2020)

Biochemical Analysis

➤ Several tests are species specific

CRP

HbA1c

Cardiac - **NT-pro-BNP and cTnl**

Pancreatitis - **Canine Pancreatic**

Lipase Immunoreactivity

Exocrine pancreatic insufficiency –

Canine trypsin like Immunoreactivity

Normal range printed in results





Pathology & Microbiology

- ▶ Limited number of private sector veterinary microbiologists & pathologists
- ▶ Interpretation

Imaging

- ➔ Largely restricted to bigger institutions


Radiography

USG

- ➔ CT, MRI..







Veterinary laboratory & imaging facilities

- Need for establishments – urban and semi-urban areas



Challenges

- Accreditation
- Specific standards
- Dedicated man power

Role for CAHO

THIRUVANANTHAPURAM

NABL accreditation for KVASU laboratories



E.M. Manoj

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CAHO

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Thank you