with rapid healing and epithelization. Young calves were dehorned by injections of
Accidental perivascular deposits of solutions of CaCl₂ injected intravenously for the
weight/volume. Aqueous solutions permit higher concentrations but tinctures of
were observed. Various solutions of CaCl₂ have been tested, ranging from 12-75%
neoplasia (warts, sarcoids and encapsulated tumors, particularly if pedunculated)
both cells and nuclei are shrunken but remarkably intact. Experimental injections
on testicular size, amounts of
Ischemic necrosis with minor inflammatory changes appears to be the pathogenesis;
Medicine, Washington State University,
treatment of hypocalcemia are known to produce discrete areas of dry gangrene.

.21 mg on day 3 (five ewes/day) to 4.97±1.20 mg on day 9 of an estrous cycle and re-
ained at that level until day 14. Amount of protein recovered on day 14 of pregnancy
did not differ from that on day 16 of an estrous cycle (4.6±1.76 vs. 5.1±2.60 mg). Up to
35 bands were detected after isoelectric focusing of protein collected on day 14 of an
estrous cycle; only two faint bands (PI 7.2 to 7.6) were not present also in blood
serum. With the exception of the two bands between pH 7.2 and 7.6, protein collected on
days 3 and 9 of an estrous cycle focused a smaller number of bands. During pregnancy,
uterine protein differed from that collected during an estrous cycle as follows: 1) after
day 14, a pregnancy-specific protein migrated toward the cathode at pH 4.5; 2) after
day 13 of pregnancy, increased staining intensity occurred for a protein of >
9000 MW; and 3) proportions of proteins focused between pH 5.4 and 7.0 decreased on day
14 of pregnancy. Compared to blood serum, uterine protein collected from ovariectomized
ewes in experiment III (five ewes/treatment) had a higher proportion of proteins fo-
cused at less than pH 4.7. After 10 days of progesterone replacement, the proportion of
proteins focused at less than pH 4.7 decreased while recoverable protein increased (1.20
±.26 vs 3.48±1.20 mg). Twenty-one protein bands were detected after progesterone treat-
ment and 37 of these (PI 7.2) was not present also in serum. Extravasal replace-
ment increased recoverable uterine proteins (4.98±2.17 mg) but profiles of protein col-
lected after estrogen treatment were not different from those observed in control ovari-
ectomized ewes. Progesterone plus estradiol increased the proportion of proteins fo-
cused between pH 4.7 and 5.8. The present study demonstrates that the majority of pro-
teins in uterine lumenal fluid are present also in blood serum and progesterone is the
major steroid influencing the presence of proteins in uterine fluid of ewes.

451. Calcium Chloride, Practical Necrotising Agent. I. M. Koger, D.V.M. College of Veterinary
Medicine, Washington State University, Pullman, WA 99163.
Accidental perivascular deposits of solutions of CaCl₂ injected intravenously for the
 treatment of hypercalcemia are known to produce discrete areas of dry gangrene.
Inchent necrosis with minor inflammatory changes appears to be the pathogenesis;
both cells and nuclei are shrunken but remarkably intact. Experimental injections
revealed practical applications: e.g. destruction of superficial hyperplasia and neoplasia (warts, sarcoeds and encapsulated tumors, particularly if pedunculated)
with rapid healing and epithelization. Young calves were dehorned by injections of
0.5-1.5 mls. Castration of calves, dogs, kids, lambs and pigs by intratesticular
injections was a simple procedure with less pain than surgically done. Depending
on testicular size, amounts of 0.1-1.0 mls. were distributed throughout the testicle.
Resulting orchitis subsided in 3-6 days, followed by sclerosis and atrophy, leaving
a cord-like remnant in 60-90 days. Small gauge needles (20-26 ga.) of sufficient
length to distribute the solutions were used. If an excess was injected, or if
leakage out of the tunica albuginea occurred, hypostatic dry gangrene of the
scrotum was followed by sloughing and uneventful healing. No septicemia or myiasis
were observed. Various solutions of CaCl₂ have been tested, ranging from 12-75%
weight/volume. Aqueous solutions permit higher concentrations but tinctures of
25-30 Gms. CaCl₂ q.a. 300 mls. of 80-99% ethanol have definite advantage of less
pain, less peripheral inflammatory reaction, and more consistent results. These
procedures avoid open surgery with its limitations and problems.

452. Susceptibility of the Pig Corpus Luteum to PGF₂α at Various Stages of Pregnancy. Robert
R. Kraeling* and George B. Rampacek, USDA, ARS and University of Georgia, Athens.

Pregnant crossbred gilts were randomly assigned to 1 of 12 treatments to study the
susceptibility of the CL to the luteolytic action of PGF₂α at various stages of
pregnancy. Groups 1 through 6 were injected with 10 mg of PGF₂α free acid and groups
7 through 12 were injected with saline on day 10, 30, 50, 70, 90 or 110 of pregnancy,
respectively. The number of gilts in each group were: (1) 4, (2) 3, (3) 3, (4) 4,
(5) 3, (6) 3, (7) 3, (8) 3, (9) 3, (10) 3, (11) 1, and (12) 2. Blood samples were
taken via anterior vena cava puncture on the day of and 1, 2, 6, and 12 days after
injection and were assayed for progesterone (P) by RIA. None of the gilts in groups 6
through 11 aborted, but the 2 gilts in group 12 farrowed on day 114 and 115. Plasma P
levels were similar in all gilts of groups 6 through 11 during the sampling period (10
to 24 ng/ml), whereas P levels of the 2 gilts of group 12 declined from 13 to less
than 1 mg/ml by day 6 after saline injection. Within 30 hours after PGF₂α injection,
groups 2, 4, and 5 aborted and within 48 hours after PGF₂α, group 6 farrowed, while
pregnancy continued in groups 1 and 3. P levels of group 1 remained stable during the