

## Haemobiogram after Intramuscular Administration of Amoxicillin to Sheep

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**Abstract :** There are many bacterial infections affecting sheep that necessitates antibiotic intervention. Amoxicillin is among commonly used antibiotics in such case for its broad spectrum of activity. However, the side alterations in blood and organ function that may be associated during or after treatment are questionable. Therefore, the aim of the present study was to assess the possible alterations in blood parameters and organ function bio markers of sheep that may occur following intramuscular injection of amoxicillin. Amoxicillin has been administered intramuscularly to 10 sheep at a dosage regimen of 7 mg/kg of body weight for 5 successive days. Two types of blood samples (with and without anticoagulant) were collected from the jugular vein pre- and post-administration of the drug. Amoxicillin significantly ( $P < 0.001$ ) increased total leukocyte count and ( $P < 0.05$ ) absolute eosinophilic count when compared with those of the control samples. Aspartate aminotransferase, alkaline phosphatase and cholesterol were significantly ( $P < 0.05$ ) higher than the corresponding control values. In addition, amoxicillin significantly ( $P < 0.05$ ) increased blood urea nitrogen and creatinine but decreased phosphorus level when compared with those of prior-administration samples. These data may indicate that although the side changes caused by amoxicillin are minor in sheep, yet the liver and kidney functions should be monitored during its usage in therapy and it should be used with care for treatment of sheep with renal and/or hepatic impairments.

**Keywords :** amoxicillin, biogram, haemogram, sheep

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