



D.G. PARSONS

PIGEON NEWSLETTER

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Issue 2

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CHEVIVAC-S

I have been asked by several fanciers about vaccinating prior to the race season. I have made enquiries through Chevita's expert have provided the following information.

1. In lofts that have been regularly vaccinated and have not had a clinical problem, there is no need to treat with antibiotic before vaccinating.
2. Vaccinating for the first time is stressful. It is best not to exert the birds for 2 weeks after vaccination.
3. Ensure all pigeons are vaccinated at least 3 weeks before the first race or show.
4. Young birds can be vaccinated from 4 weeks of age onwards.

PARAMYXOVIRUS VACCINATIONS

It was a pleasant but cold day last November when I went to vaccinate some pigeons in Northamptonshire. The venue and pigeons were arranged by Russell Bradford. There was fresh air a plenty. A combination of holding the vaccination gun in one hand and using surgical spirit to clean the skin and lay the feathers down with the other, ensured that my hands were a little cooler than the rest of me.

As soon as we had a system in place, re-



coding the ring numbers and vaccinating the pigeons proceeded at a brisk pace. Definitely a case of many hands make light work. Hand warming cups of coffee were sup-

plied throughout.

My grateful thanks to Clare for Sunday lunch and Russell (Clare's husband) for the photo.

COMING SOON — PRO-TEX™ - PIGEONS (tablet samples enclosed)

ANNUAL RETAINER

I am pleased to say that the practice is building steadily in no small part due to the support of my Registered clients. As a thank you for your support I will be setting the renewal date for your registration with the Practice to 31st March 2009.

WEBSITE

Arranging for a password protected area

has been more complicated than I thought.

Andrew, my son and student IT expert, thinks he can now sort it out. We shall see.

In the meantime I have added a new domain:

www.ukpigeonvet.co.uk

I will place information here, some of which will eventually be password protected.

BISOLVON

The active ingredient is Bromhexine hydrochloride. It functions as an aid in treating respiratory disease where mucus is a problem. It will help remove the mucus and improve the uptake of antibiotics. It can be mixed with antibiotics. More information is available on my web site.

Bacterial Sensitivity Tests

In this article I am going to try and explain what we do at the laboratory and what the results of antibiotic sensitivity testing mean.

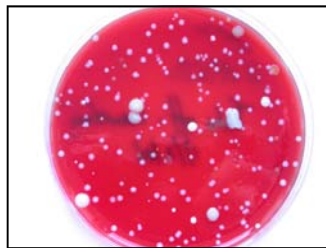
There are very many different types of disease-causing bacteria. In general terms some are round, some are more tubular and others are more corkscrew in shape. They may or may not be able to move. The environmental requirements for these bacteria are also very different. Some bacteria grow well in the presence of air i.e. oxygen, and other bacteria cannot grow at all. Some bacteria can grow in either situation. Bacteria are probably some of the best adapted organisms on the planet and can grow as easily at the bottom of the seabed as in a volcano. It is just as well that none of these tend to cause us disease problems or a blow torch in the loft would suddenly seem to have very little use!

So we have different shapes of bacteria, some that move and others that don't and bacteria that grow in different atmospheric requirements. Next we have our ability in the laboratory to grow them at all. There are various types of growing media - plates that contain specialised jelly with nutrients that ei-

ther grows a whole range of bacteria or a specific few. Unfortunately there are some bacteria that we just cannot grow at all. We know this because if you look at situations where you see bacteria, i.e. post-mortem samples, when you use your routine tests nothing grows.

When you send in pigeon faeces samples for screening for E-coli or salmonella we are basically doing a very simple test. Both E-coli and salmonella grow in the presence of air. Having got them to grow we put them onto special media so that we can identify which is which and then we attempt an antibiotic sensitivity test. This is the crucial part of the exercise from the practical point of view.

What do we mean by antibiotic sensitivity? In this instance you have to think of what the bacteria, not the pigeon, is sensitive or resistant to. When we say an E-coli is sensitive to a particular antibiotic, we mean that the antibiotic, if given to a pigeon that is sick with that particular bacteria,

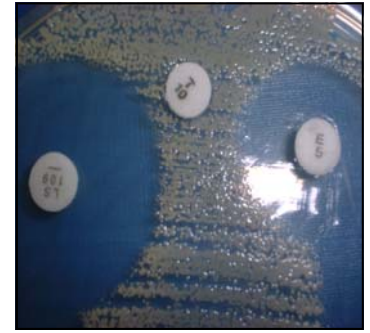


Each of the grey to white circular areas are colonies of millions of bacteria.

should kill the bacteria and thereby effect a cure in the pigeon.

On the sensitivity plate the laboratory have prepared you will see little discs with very small amounts of different antibiotics on them (such as Amoxycillin, Tylan, Linco-spectin and others that a particular laboratory will use). We then attempt to get the bacteria to grow. The antibiotic that is in the little paper discs spreads out from the disc in the moisture of the jelly so that there is a circle of antibiotic in the jelly around a given paper disc. If the bacteria are sensitive or can be killed by that particular antibiotic then it won't grow and we have a clear space of jelly surrounding that disc. If the bacteria are not affected by that particular antibiotic and are resistant to it, the bacteria can grow right up to the edge of the paper disc. Additionally, as this is a biological system, there are times when we find that the bacteria are not completely sensitive or completely resistant to a given antibiotic.

When our report is written you will have a list of the antibiotics to which the organism was sensitive - antibiotics that will be useful for treating pigeons with this particular infection. An R indicates resis-



T = Tetracycline, LS= Linco-spectin, E = Erythrocine. This bacteria is sensitive to E & LS but Resistant to T

tance and an I indicates that the bacteria was intermediate between sensitive and resistant.

However as with all things biological that is not the end of the story. Within the pigeon some bacteria live within the pigeon cells, other bacteria live on the surface of the pigeon cell i.e. in the intestine. This of course will affect how easy it is for us to get antibiotic to the site of an infection in any given bird. Sometimes we also find that whilst an antibiotic, in theory, should be ineffective in treating a pigeon, since the pigeon itself is trying to kill the bacteria, then the combination of antibiotic plus the pigeons own natural immunity may still work. Occasionally the opposite also occurs when an antibiotic which should work is unsuccessful. The reason for this could be quite simply that the antibiotic is unable to get to the site of the infection.

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