



Clínica Fiorela  
CENTRO DE TERAPIA DEL DOLOR

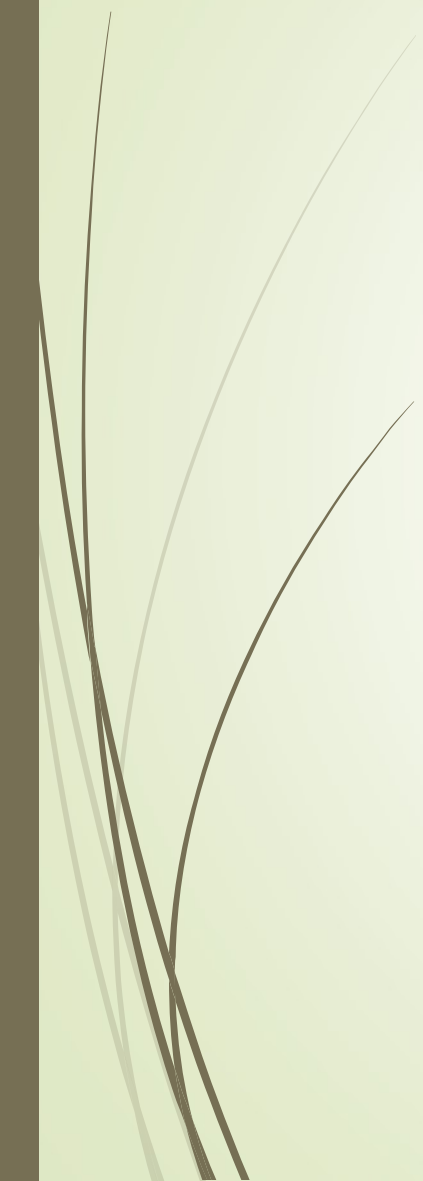
# Intravaginal Ozone Insufflation in the VPH infections.

Dr. Adriana Schwartz M.D. GYNECOLOGIST

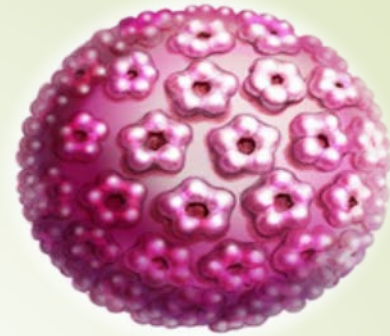
Clínica Fiorela Madrid



# PAPILOMA VIRUS (VPH)

- ▶ The human papillomavirus (HPV) is a global concern.
  - ▶ Today it is suspected that there are a hundred subtypes of HPV, according genomic characteristic present different risks and different oncogenic power.
  - ▶ High risk genotypes are found in 90% of cervical cancers, HPV16 in particular seems to be the most virulent.
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# HPV

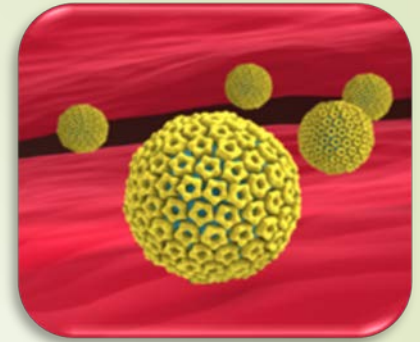


- ▶ It is now known that the HPV virus is a small circular double stranded DNA, non-enveloped, containing approximately 8000 base pairs and 8 genes.
- ▶ HPV target cell is the keratinocyte a stratified cell growth, since this virus needs this stratification to mature and reproduce.
- ▶ The cellular receptor for the HPV type is a  $\alpha 6\beta 4$  integrin present on the surface of keratinocytes of the basal layer.
- ▶ Once the virus enters the cell, it will launch a series of mechanisms to deceive the security system cell, evade the immune response and to integrate into human DNA to survive and replicate.



# ONCOVIRUS

- ▶ One of the research areas recently occupied more space in the scientific work is to oncogenic viruses. For example, it has been scientifically proven that HPV may be the cause of anal cancer and oropharyngeal carcinomas.
- ▶ Meanwhile, hepatocellular carcinoma is closely related to hepatitis C virus (HC).
- ▶ Cytomegalovirus (CMV) has also become one of the subject of attention that relates it with cancer.
- ▶ There are several data linking CMV infection and cancer of the salivary glands, malignant gliomas and medulloblastomas.



- The Epstein-Barr virus (EBV) also especially drawn scientific attention.
- The etiological relationship between EBV and nasopharyngeal carcinoma, and Burkitt's lymphoma has been previously documented.
- Meanwhile, other malignant tumors such as Hodgkin lymphoma have been linked with this virus.
- Furthermore, it is discussing its role in the development of stomach cancer.
- It is therefore not surprising that, for these reasons, the scientific interest is so high on the EBV.



# Design of the study

## Objective:

To prove the effectiveness of the O2/O3 in the treatment of HPV infections in the cervix of the uterus in patients who have not had spontaneous remission after 1 year of the first diagnosis.

## Two groups were formed:

- a) Group of patients (n = 17), treated with O2 / O3 and homeopathy.
- b) Group of patients (n = 8) treated only with ozone.



# CRITERIAS

## INCLUSION

- ▶ CIN I to III confirmed with old and new cytology with a minimum of 8 months of evolution.
- ▶ Do not perform any other treatment.

## EXCLUSION

- ▶ Perform other treatments.
- ▶ No present the cytologies.
- ▶ Failure to follow the guidelines.

# PROTOCOL

## ❖ To the first group we applied

- a) 10 vaginal sessions and 5 sessions of UV-Light blood irradiation, 5 sessions once a week, dose of 1.5-2.0 mg of ozone.
- b) Homeopathic treatment with 2LPAPI for 3-6 month, GSH 600 mg + 1 gr VitC, Zinc 5 µgr + Selenio 100 µgr in IV infusion twice weekly.
- c) Application of daily intravaginal 1 mL ozonated oil of 600 IP

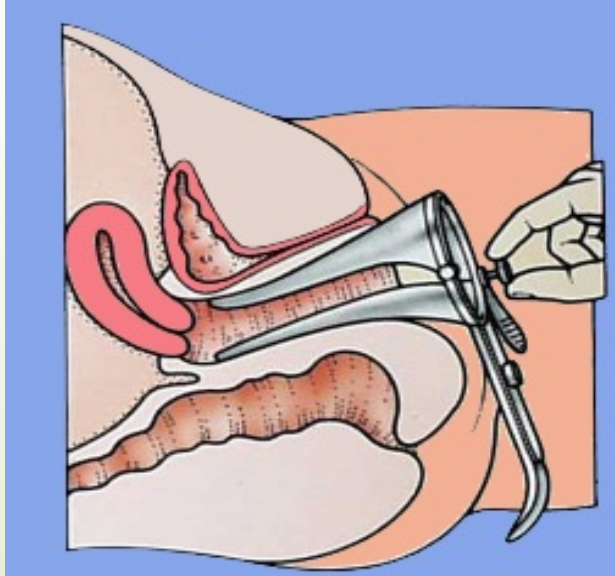
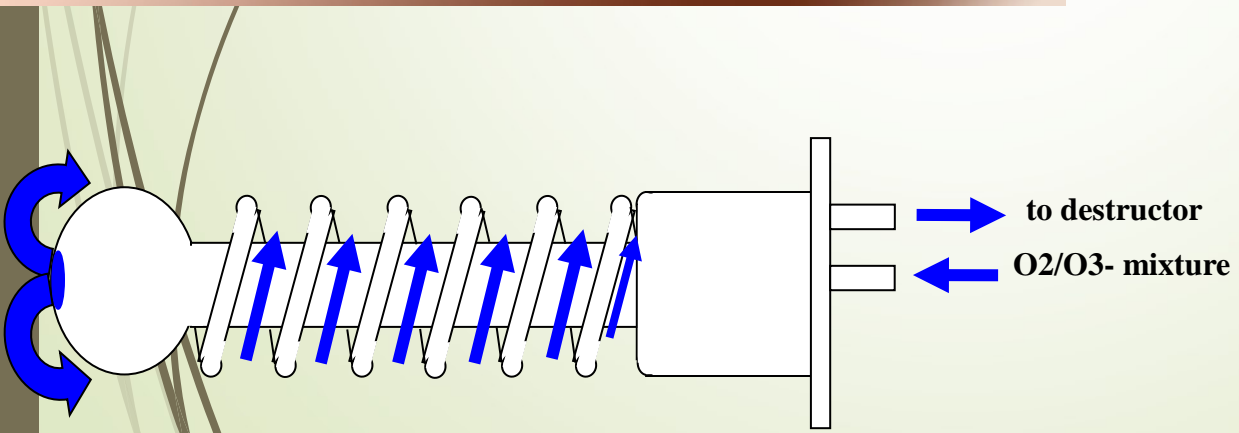
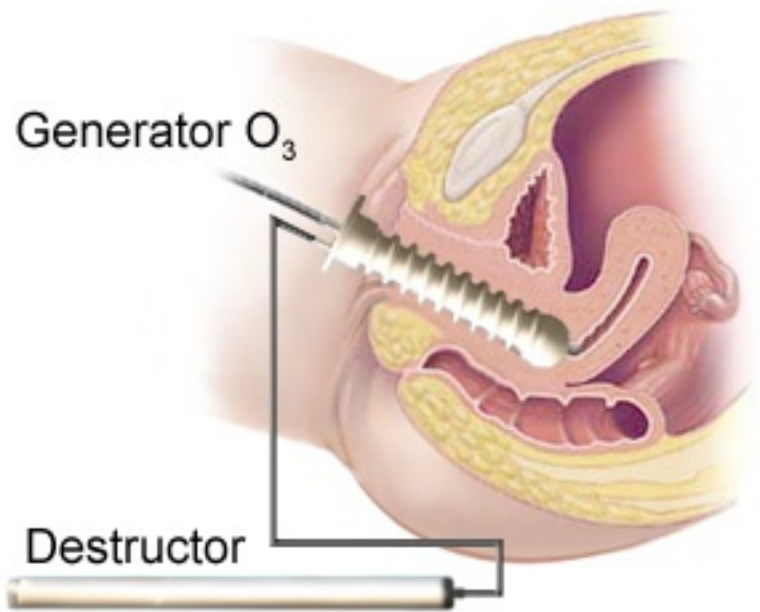
## ❖ The control group was held just with

- a) 10 vaginal sessions using a vaginal device specially designed for this purpose.
  - b) 20 µg/ml O<sub>2</sub>/O<sub>3</sub> continuous flow of 200 mL / min 10 min session, gradually increasing up to 60 µg/ml decreasing the time to 3-5 min
- ❖ Assessment of the effectiveness, with vaginal cytology after three months since the last therapy.

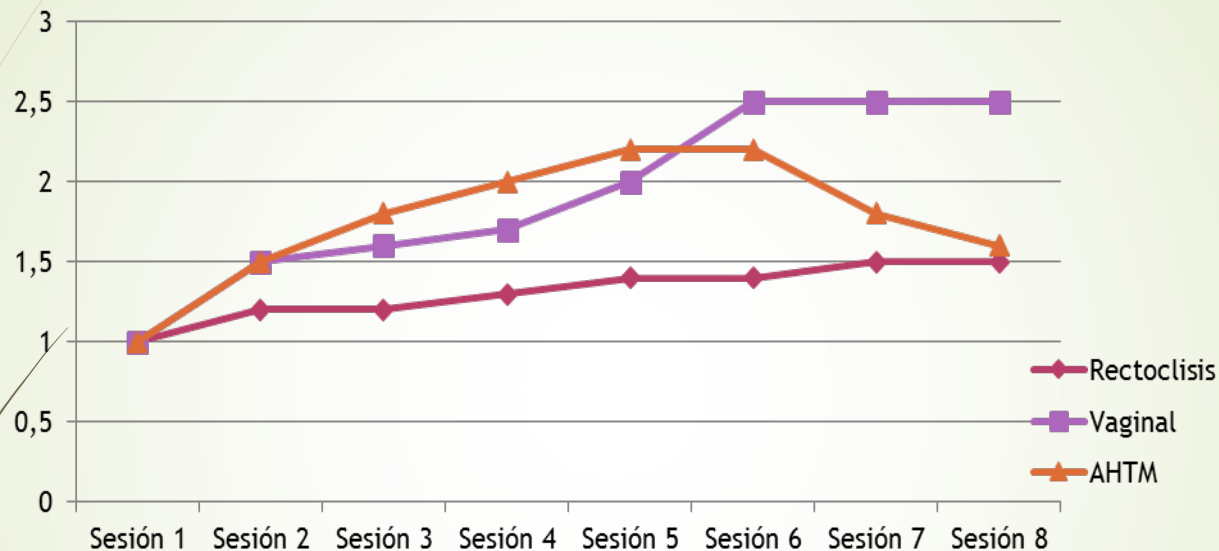




*“Bozon-VIN-150”- vaginal insufflation of ozone-oxygen mixture, pure ozonide oil or vaginal instillation of ozonized water*



# Comparative dynamics of capillary blood flow speed, during major auto-hemotherapy, rectocclisis and vaginal insufflation.



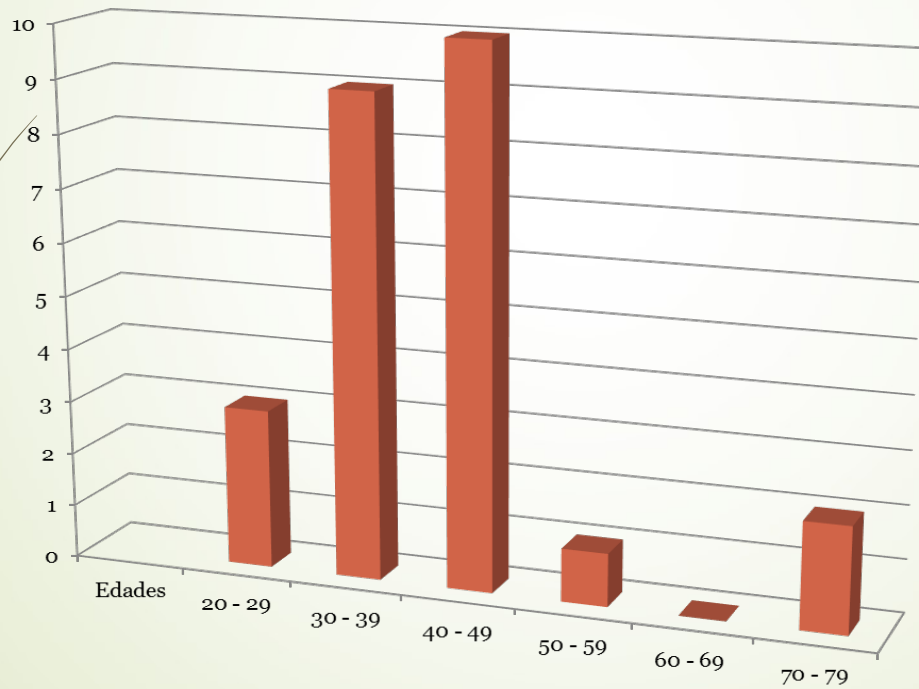
Vertical coordinate shows the rate of capillary flow (cm/seg)  
Horizontal coordinate shows the number of sessions  
Rectal insufflation: 0.4 L O<sub>2</sub>-O<sub>3</sub> concentration 30 mg/L  
Vaginal insufflation: 20 µcg/mL, 200 mL/min 10 min  
AHTMajor: dose 2mg

# Frequency of therapies

**N° of patients**



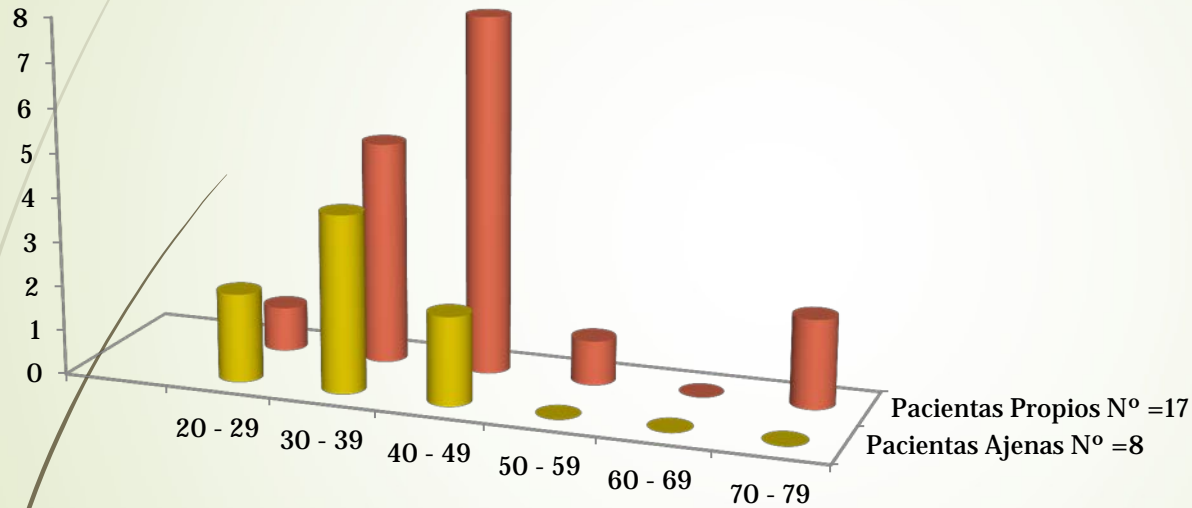
# Total age distribution. Patients Number = 25



# Groups distribution

First group 17 patients

Second group 8 patients



# Ages and affectation

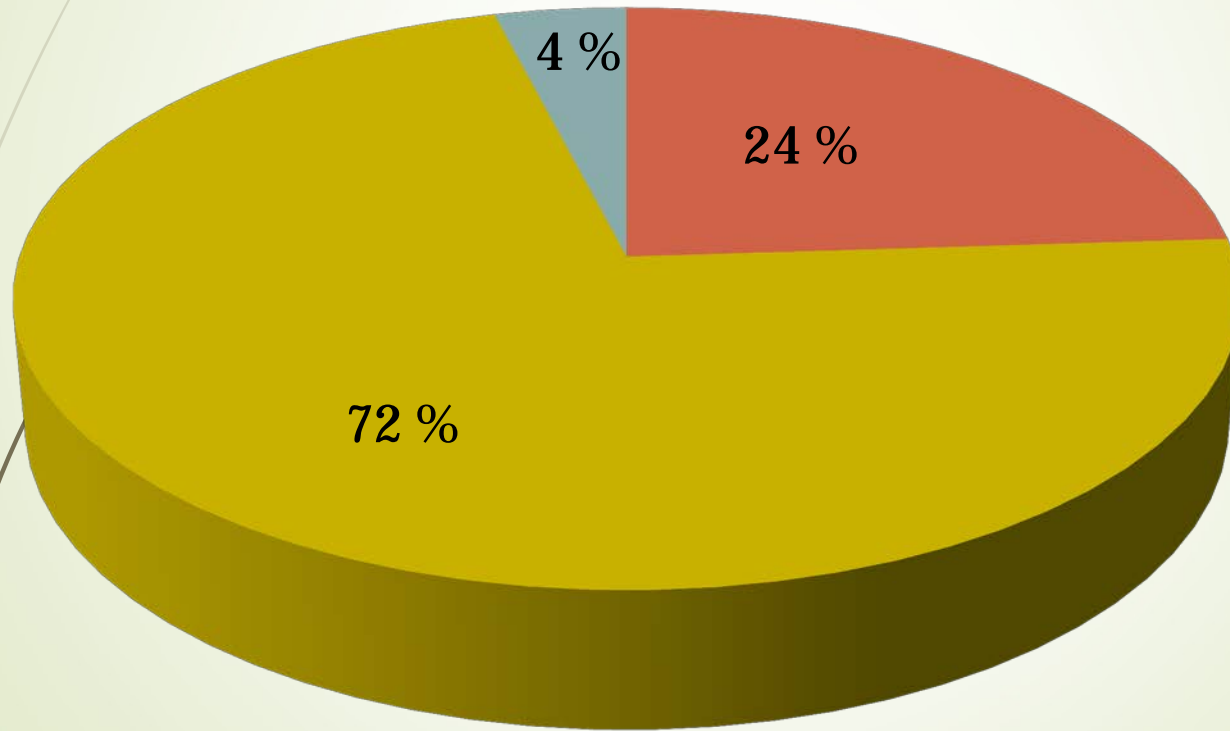
**First group:** Age range: 29 to 75

- ▶ Average age: 47.6 to CIN I: 4 CIN II 12: CIN III: 1
- ▶ Smokers (> 10 c / day): 10 17 => 59%

**Second group:** Age range: 27-41

- ▶ Average age: 35.2
- ▶ CIN I: 2 CIN II: 6 CIN III: 0
- ▶ Smokers (> 10 c / day): 4 of 8 => 50%

# Distribution by CIN



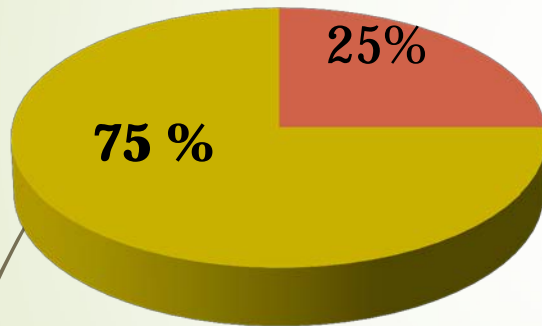
■ CIN I

■ CIN II

■ CIN III

# Distribution of the individual groups

2nd group

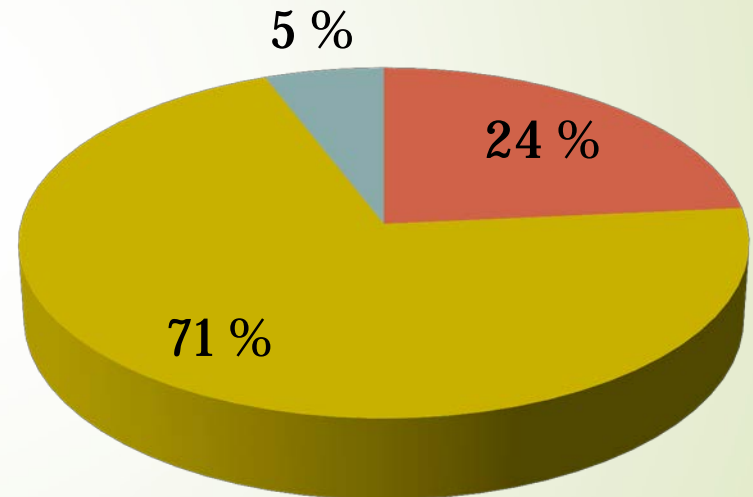


■ CIN I

■ CIN II

■ CIN III

1st group



■ CIN I

■ CIN II

■ CIN III



# Results

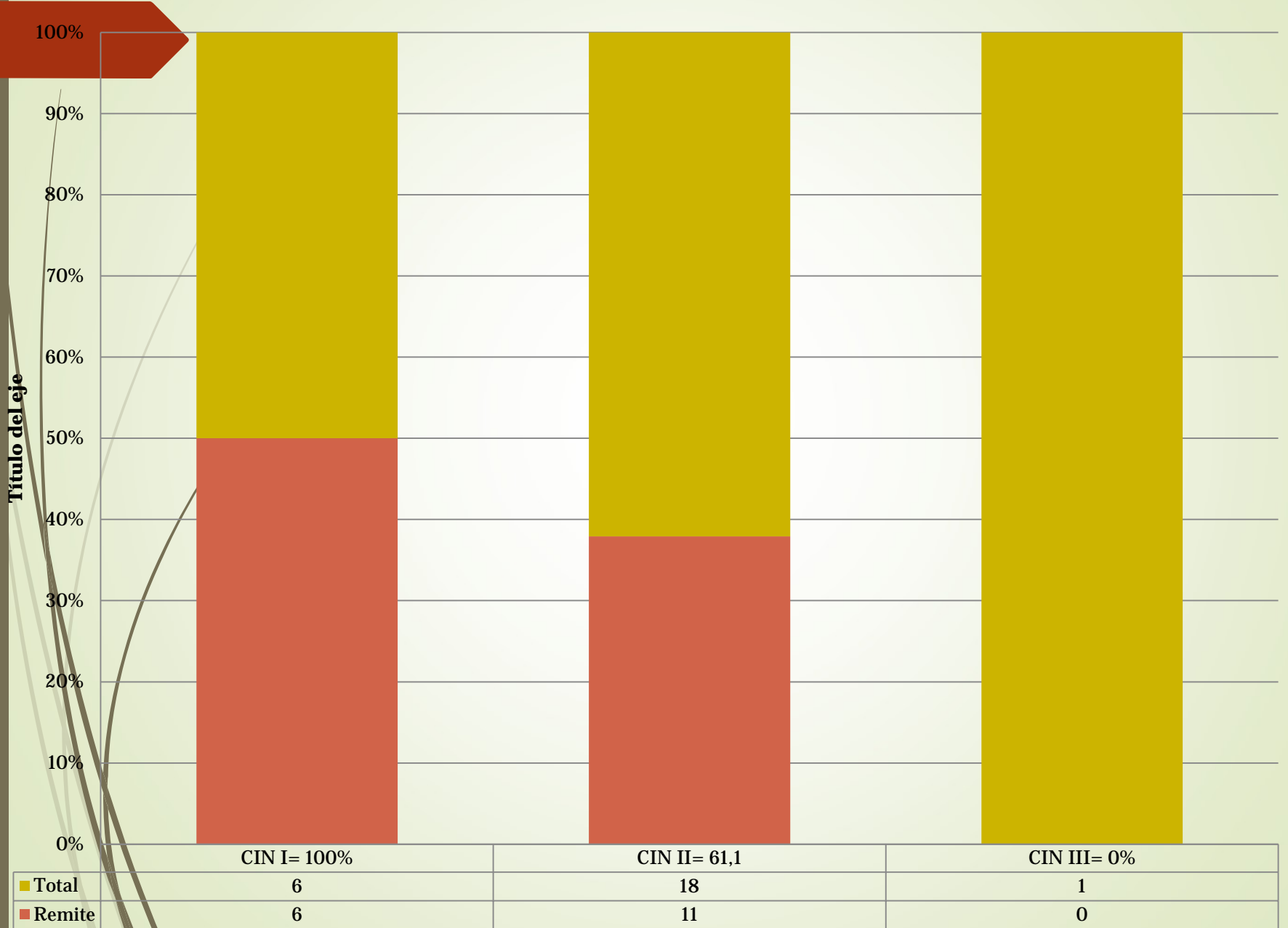
- ▶ Positives (negative cytology after 3 months of therapy conclude)
  - ▶ First group: 12 of 17 => 76.6 % Average age: 47.6 a
  - ▶ Second group: 5 de 8 => 62.5 % Average age: 35.2 a
- ▶ Negatives (Positive cytology after 3 month of the therapy conclude)
  - ▶ Firsts group: 5 of 17 => 29.4 %
  - ▶ Second group: 3 of 8 => 37.5 %

# Results by age

Eliminating the patients who represent a high dispersion

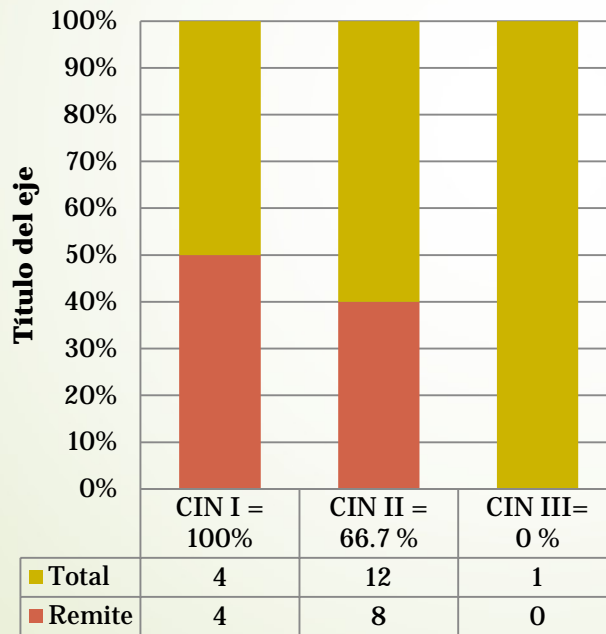
- ▶ Positives (negative cytology after 3 month of the therapy conclude)
  - ▶ First group: 10 of 15 => 66.7 % → Average age 42.5 a.
  - ▶ Second group: 5 of 8 => 62.5 % → Average age 35.2 a.
- ▶ Negativess (Positive cytology after 3 month the therapy conclude)
  - ▶ First group: 5 of 15 => 33.3 %
  - ▶ Second group: 3 of 8 => 37.5 %

# Total remissions

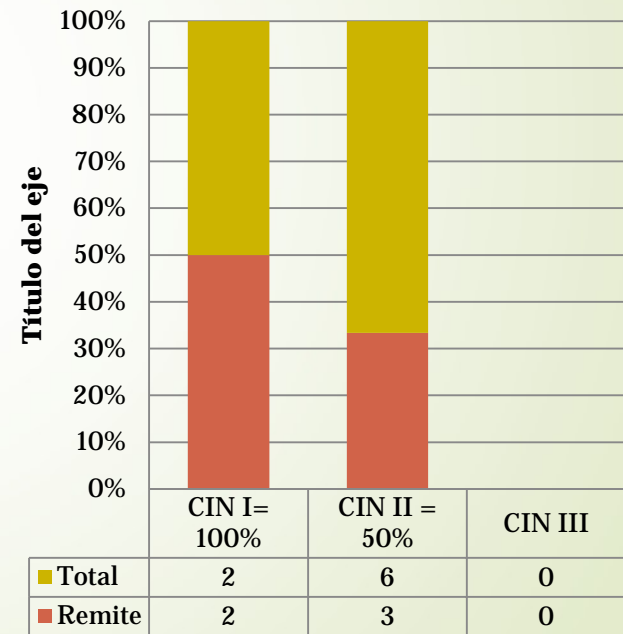


# Remissions by groups and CIN

## First group remissions



## Second group remissions



# Conclusions

- ▶ Intravaginal therapy O2 / O3 proves to be effective in a affected difficult group (no spontaneous remission)
- ▶ This represents a significant percentage of patients to whom we may act.
- ▶ Limiting only 60% of 33% of which persist, this is means a decrease to 13% of persisting

	Remission	Persist	Progresses to CIN III	Progresses to Ca invasive
CIN I	57 %	32 %	11 %	1 %
CIN II	43 %	35 %	12%	5 %
CIN III	32 %	56 %		12 %

# Conclusions

- ❖ Therapy O<sub>2</sub> / O<sub>3</sub> is a simple, quick, without side effects, cheap and effective therapy It was perfectly accepted by all patients, the effects obtained are stable.
- ❖ It can be combined with any other therapy and does not interfere with any.
- ❖ While the number of patients does not allow a safe conclusions, with the analyzed patients using Glutathione therapy, VitC, Se, Zinc and 2LPAPI presents great advantages over OZONE alone.

THANK YOU VERY MUCH

