

Acute Coronary Syndrome 환자에서 혈중 Triglyceride 농도와 당뇨병과의 상관관계

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서론

이 분석에서는 857명의 acute coronary syndrome(ACS) 환자에서 혈중 Triglyceride(TG) 농도와 당뇨병 여부의 상관관계를 알아보고자 한다.

방법

moonBook::acs 자료를 사용하였다.

결과

유의미한 차이를 찾을 수 없었다.

```
library(tidyverse)
library(readxl)
library(moonBook)

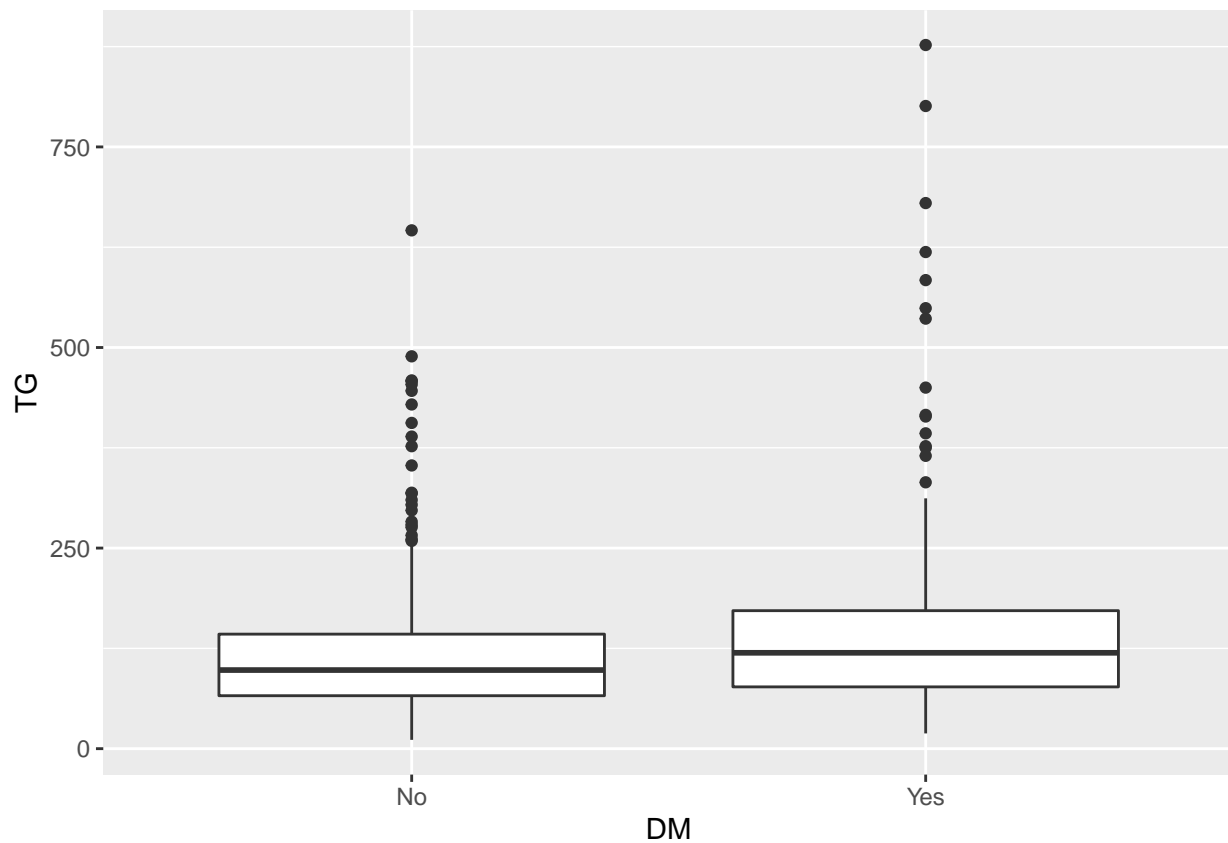
#setwd("C:/Users/Sohee/Documents/R/Directories")

raw_acs <- read_excel("acs.xlsx") %>%
  mutate(TG = as.numeric(TG))

raw_acs %>%
  group_by(DM) %>%
  summarise(median_TG = median(TG, na.rm = TRUE),
            sd_TG = sd(TG, na.rm = TRUE))

## # A tibble: 2 x 3
##   DM    median_TG sd_TG
##   <chr>      <dbl> <dbl>
## 1 No         98    75.4
## 2 Yes      120.  111.

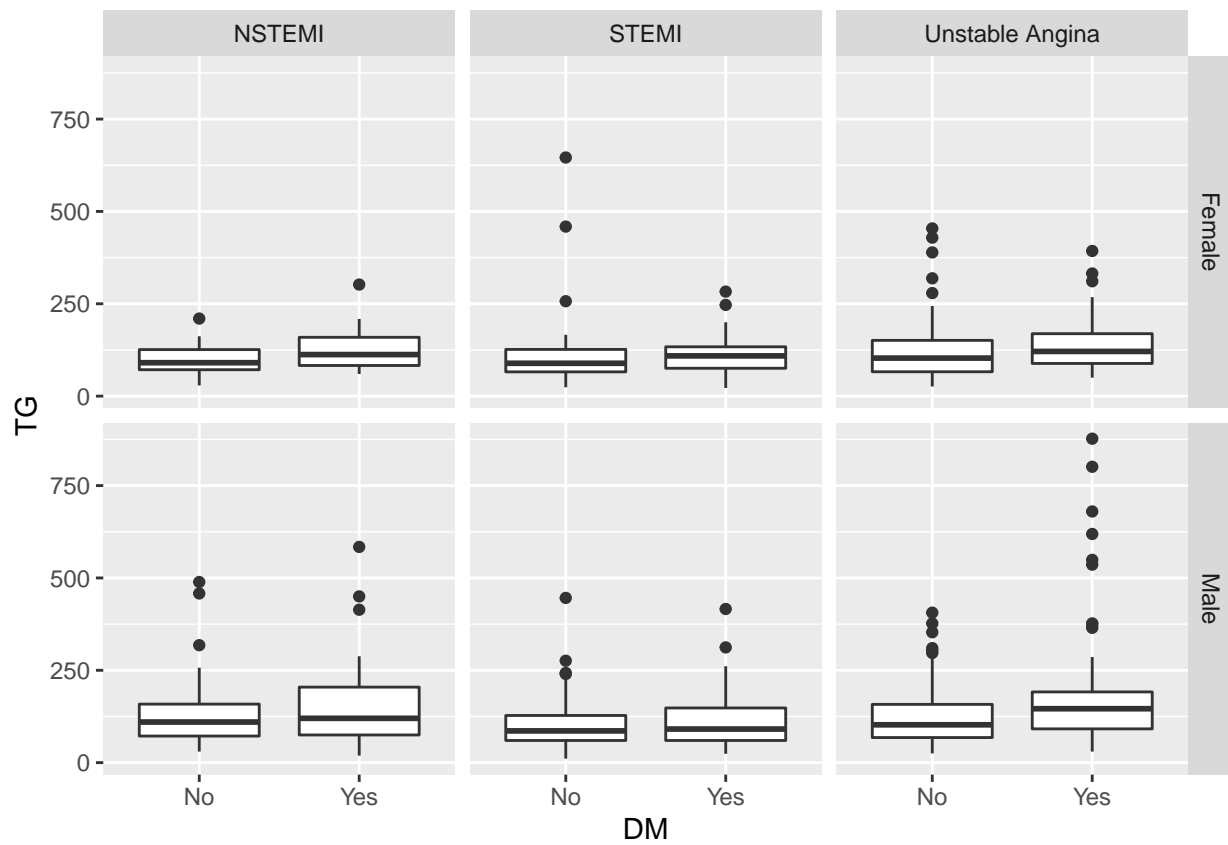
qplot(x = DM, y = TG, data = raw_acs, geom = 'boxplot')
```



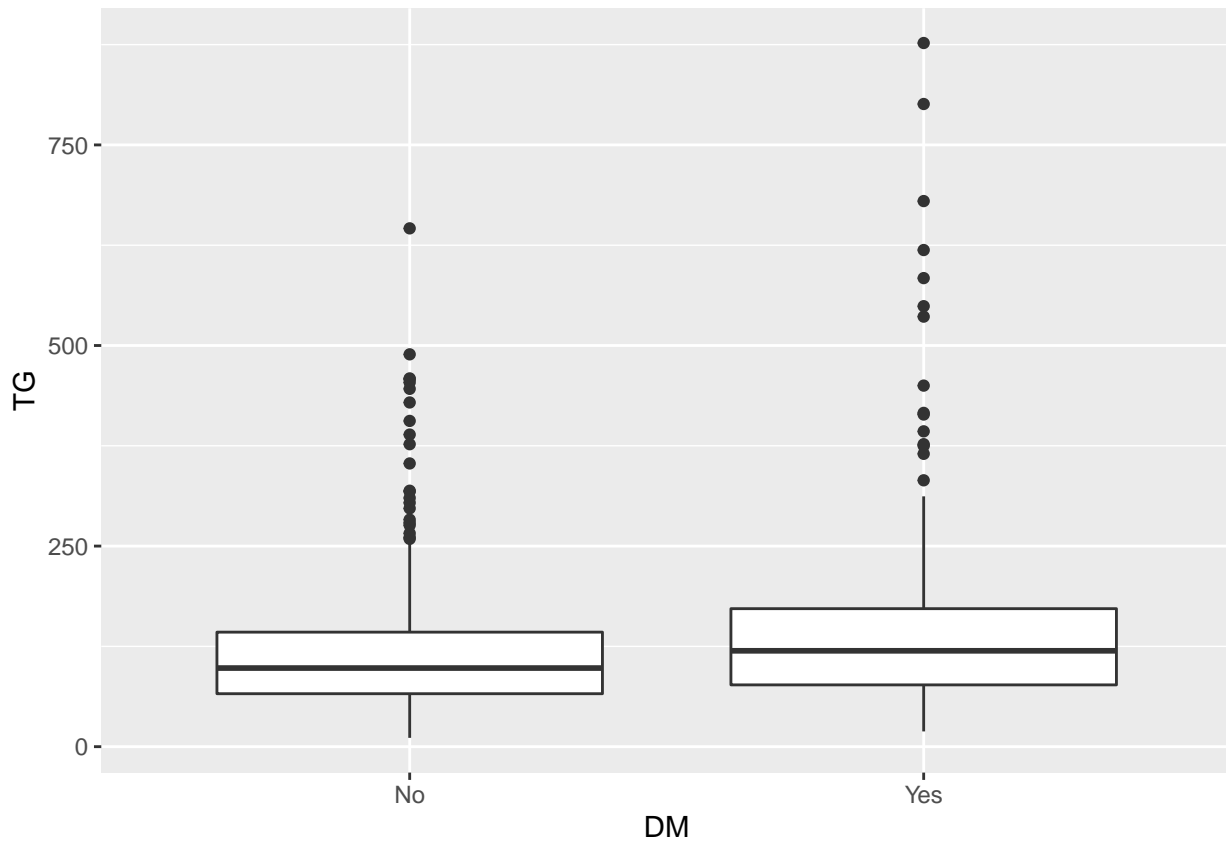
```
raw_acs %>%
  mutate(TG = as.numeric(TG)) %>%
  group_by(Dx, sex, DM) %>%
  summarise(median_TG = median(TG, na.rm = TRUE),
            sd_TG = sd(TG, na.rm = TRUE))
```

```
## # A tibble: 12 x 5
## # Groups:   Dx, sex [6]
##   Dx      sex    DM median_TG sd_TG
##   <chr>   <chr> <chr>    <dbl> <dbl>
## 1 NSTEMI Female No      90.5  42.1
## 2 NSTEMI Female Yes    112.  56.3
## 3 NSTEMI Male   No      110  84.0
## 4 NSTEMI Male   Yes    120  128.
## 5 STEMI  Female No      89  100.
## 6 STEMI  Female Yes    109  59.4
## 7 STEMI  Male   No      86  61.5
## 8 STEMI  Male   Yes     91  73.9
## 9 Unstable Angina Female No    103  78.5
## 10 Unstable Angina Female Yes   121  71.3
## 11 Unstable Angina Male   No   102.  74.4
## 12 Unstable Angina Male   Yes   146  154.
```

```
qplot(x = DM, y = TG, data = raw_acs, geom = 'boxplot', facets = sex ~ Dx)
```



```
qplot(x = DM, y = TG, data = raw_acs, geom = 'boxplot')
```

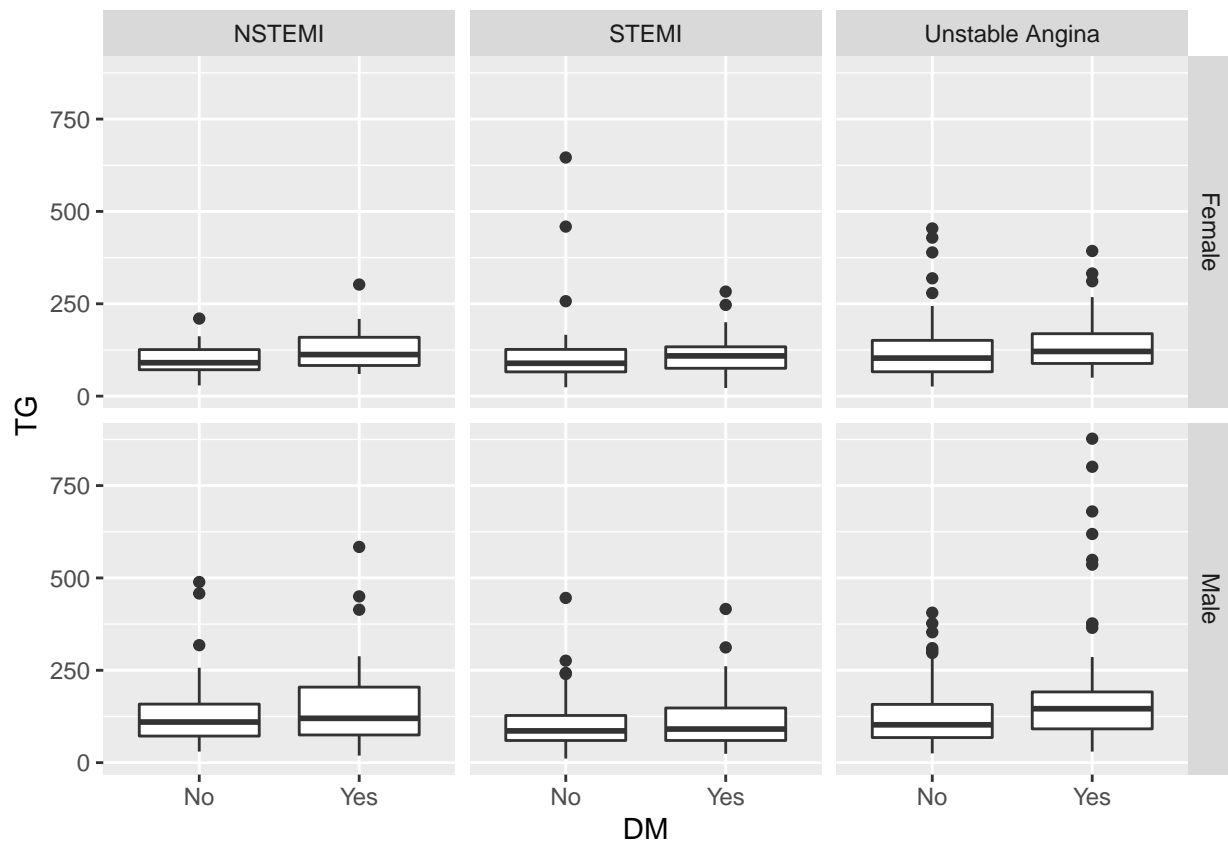


성별과 진단을 고려해도 유의미한 차이는 없었다.

```
raw_acs %>%
  mutate(TG = as.numeric(TG)) %>%
  group_by(Dx, sex, DM) %>%
  summarise(median_TG = median(TG, na.rm = TRUE),
            sd_TG = sd(TG, na.rm = TRUE))
```

```
## # A tibble: 12 x 5
## # Groups:   Dx, sex [6]
##   Dx      sex    DM median_TG sd_TG
##   <chr>   <chr> <chr>    <dbl> <dbl>
## 1 NSTEMI Female No      90.5  42.1
## 2 NSTEMI Female Yes    112.   56.3
## 3 NSTEMI Male   No      110   84.0
## 4 NSTEMI Male   Yes    120  128.
## 5 STEMI  Female No      89  100.
## 6 STEMI  Female Yes    109   59.4
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## 9 Unstable Angina Female No    103   78.5
## 10 Unstable Angina Female Yes    121   71.3
## 11 Unstable Angina Male   No    102.   74.4
## 12 Unstable Angina Male   Yes    146  154.
```

```
qplot(x = DM, y = TG, data = raw_acs, geom = 'boxplot', facets = sex ~ Dx)
```



결론

ACS환자에서 TG를 비롯한 진단, 성별 등은 당뇨병 유무와 유의미한 상관관계를 가지지 않았다.